Charles University
Faculty of Education

Department of the English Language and Literature

BACHELOR THESIS

Sociophonetic Variability in the Occurrence of Intrusive-R in English Native Speech

Sociofonetická variabilita ve výskytu intrusivního r v řeči rodilých mluvčích anglického jazyka

Denis Vaníček

Supervisor:	Mgr. Kristýna Červinková Poesová, PhD.
Study programme:	Specialization in education (B7507)
Branch of study:	Anglický jazyk se zaměřením na vzdělávání
	Německý jazyk se zaměřením na vzdělávání

2017

I hereby declare that this bachelor thesis "Sociophonetic Variability in the Occurrence of Intrusive-R in English Native Speech" is my original work and no other sources than those listed on the works cited page were used in its compilation. I also declare that this thesis was not used to obtain another or the same university degree.

Prague, April 21, 2017

.....

Denis Vaníček

Acknowledgements

Firstly, I would like to express my sincere gratitude to my supervisor Dr. Kristýna Červinková Poesová for the support and expert guidance she provided me with during the writing of this thesis.

I have also greatly benefited from the insightful comments and suggestions given by Dr. Tereza Topolovská and Dr. Klára Matuchová.

This thesis would not have materialised without the invaluable contributions of my colleagues and good friends, namely Bibiana Machátová, David Thompson, Scott Kerpen, Kiley Deveraux and Caitlyn Wilson who were kind enough to help me with the procurement of the speakers.

Last but not least, I would like to show the deepest appreciation to my family and friends whose infinite patience and love kept me afloat.

ANOTACE

Tato práce se zaměřuje na popsání potenciálně relevantních sociálních faktorů ovlivňujících výskyt intrusivního r v řeči rodilých mluvčích anglického jazyka. V teoretické části je pozornost věnována aspektům souvislé řeči, podrobnému popisu intrusivního r a terminologii z oblasti sociofonetiky, zejména ve vztahu k sociofonetické variaci. Praktická část obsahuje percepční analýzu dvaceti nahrávek krátkého anglického textu, na nichž byl výskyt intrusivního r zkoumán v řeči rodilých mluvčích ze Spojeného království, Austrálie, Irska a USA s důrazem na přílušnost k sociální třídě a stupeň roticity.

KLÍČOVÁ SLOVA

intrusivní r, sociofonetika, variace, variabilita, souvislá řeč, percepční analýza

ABSTRACT

This thesis focuses on the description of potentially relevant social factors which may influence the occurrence of intrusive /r/ in English native speech. The most salient aspects of connected speech, an in-depth account of intrusive /r/ and the terminology from the field of sociophonetics with respect to sociophonetic variation are delineated in the theoretical part. In the practical part, a perceptual analysis of twenty recordings of a short English text read by native speakers of the English language from the United Kingdom, Australia, Ireland and the United States is conducted with a special emphasis on social class membership and the level of the speakers' rhoticity.

KEYWORDS

intrusive /r/, sociophonetics, variation, variability, connected speech, perceptual analysis

TABLE OF CONTENTS

INTRODUCTION

There is a copious amount of peculiar speech phenomena in the English language, from the ever challenging interdental fricatives to the suprasegmental features such as intonation, assigning an extra layer of meaning to one's utterances (Cruttenden 54). In dictionaries, one is likely to encounter standard pronunciation and isolated IPA transcriptions, but less so the marked speech mannerisms which may reveal a great deal about a person's background.

Studying the English language does not only entail acquiring a native-like accent or memorising how difficult words are articulated, but also, to a certain extent, familiarising oneself with the plethora of regional varieties and their distinct characteristics. In such undertakings, one is apt to arrive at conclusions about the speakers' status or occupation, solely based on the manner in which they produce sounds. It is no secret that teachers, for instance, are particularly easy to spot for which there must be legitimate reasons. Understandably, the social information encoded in speech may be universally recognised by the members of a specific speech community (Meyerhoff 173); consequently, a fairly common enquiry may follow about the regional background of the person if their speech exhibits features incongruent with the spatial context of the communicative situation. A truly inquisitive person would then be rather engrossed by the immense load of data contained in the miniscule subtleties hidden in speech. That is precisely how I discovered the phenomenon of intrusive /r/ which led to the compilation of this thesis. The linking sound struck me as an inexplicable occurrence since I could not fathom where it stemmed from and was convinced I must have overlooked the <r> in 'vanilla ice' when it was presented to me. I pondered why the English would impose such a random sound on the, hitherto, relatively self-sufficient mid-central vowel and concluded there ought to be a sound explanation for it. One does not simply insert graphically unrecorded components between discreet lexical items and should one tend to do so, it would be thought to be met with a decent amount of confusion on the side of the recipient. Yet, the linking element has managed to retain its elusiveness in that respect, pervading the speech of many a native nonetheless.

It was therefore decided to inspect the way the linking device operates in several varieties of the English language and to describe the tendencies and trends in intrusive /r/ usage with respect to two social categories – class membership and rhoticity. The

theoretical part of this thesis will present a description of the most significant aspects of connected speech with a principal focus on the delineation of intrusive /r/, its historical emergence, presence in native speech and the social information attached to its occurrence. In addition, the related sciences of sociophonetics and sociolinguistics will be introduced. A perceptual analysis of twenty recordings produced by native speakers of English will be carried out in the subsequent practical part; the recordings comprised a reading of a short English text contrived exclusively for the purposes of this thesis. The participants were divided into four geographical groups and their speech will be separately examined with respect to their regional origin before a general comparative analysis is conducted. Finally, the hypotheses will draw upon the theoretical framework and the current research findings made in the field with which the results of the small-scale study will then be compared.

THEORETICAL PART

1 Aspects of connected speech

The way certain words are pronounced is far more dependent on their position within an utterance, the style and the situation, among other factors, and less so on the original isolated form; this fact is then caused by the overlapping of articulatory gestures and the tendency of English speakers towards a rhythm of speech which places more emphasis on semantically significant lexical units, rendering unstressed sentence elements likely to be altered in compliance with this rule (Hardcastle 315). This phenomenon, however, is not exclusive to the English language and can be found in other languages as well; "the so-called connected speech processes are a global phenomenon of reduction and articulatory simplification" Hardcastle writes (315). Furthermore, Peter Roach contends that there is a "difference between the way humans speak and what would be found in 'mechanical speech'" (Roach 107), logically implying that these phonetic phenomena are rather a matter of physiology of the human body and their production is, thus, undoubtedly difficult to imitate authentically by a machine. Correspondingly, when analysing the most important aspects of connected speech in English, the stark contrast between the speech of a computer, provided by websites such as translate.google.com, and the actual continuous chain of utterances by a native speaker serves as a useful case in point.

Skandera asserts that the most prominent features of connected speech include "linking, strong and weak forms, rhythm, assimilation, and elision" (57). Similar views are shared by Roach who, however, does not address strong and weak elements separately, mentioning them in the chapter on rhythm (109). In *Gimson's Pronunciation of English*, Cruttenden introduces all the aforementioned aspects in more detail, pointing out that the processes occur as a result of the influence of "other, surrounding sounds" and "larger accentual and rhythmic patterns" (305). In the following chapters we will therefore briefly explore rhythm, assimilation and elision; linking will be presented in detail, with the central focus on the delineation of intrusive /r/ from various perspectives.

1.1 Rhythm

The phonetic paradigm asserts that the perceptual phenomenon of rhythm is classified as a "noticeable event happening at regular intervals of time" (Roach 107), therefore, languages can be divided into two major categories – stress-based and syllable-based – depending on the "nature of the unit" (Hardcastle 523) perceived to convey the

impression of regularity. That said, the division between syllable-based and stressed-based languages employed by linguists is not a very accurate one, as we "tend to hear speech as more rhythmical than it actually is" (Roach 110). In English, a stressed-based language, the interval of time between two stressed syllables appears to be the same, whether there are five, ten or fifteen unstressed ones in the stress foot (Roach 107), whereas in Czech, a syllable-based language, "all syllables tend to occur at relatively equal intervals of time, irrespective of whether they are stressed or unstressed" (Skandera 88). Czech learners of English might experience difficulty in adapting to stress-timed rhythm, both actively and passively, since, among other reasons, the spoken form does not fully correspond with the original written form, irrespective of the grapheme-to-phoneme correspondence.

The timing of the speech requires specific lexical units to be compressed and phonetically simplified, resulting in the distinction between "strong and weak elements" (Roach 109), where the strong elements are generally semantically more loaded than weak ones, which are represented by grammatical words such as "articles, auxiliary verbs, conjunctions, modal verbs, pronouns and prepositions" (Volín 28). There is a tendency among foreign speakers to produce both stressed and unstressed syllables with equal prominence, length and intensity, not adhering to the rules of English phonetics which may render their speech "unpleasant to listen to and often even difficult to understand" (Volín 39). For instance, in the sentence 'I can only dream of a holiday' some learners tend to wrongly produce the full forms /aɪ kæn ˈəʊnlɪ ˈdriːm ɒv ə ˈhɒlɪdeɪ/, not reducing the vowels of the function words which makes the utterance sound fairly ponderous, since the standard rhythm pattern is not followed.

The regularity of rhythm is of such significance that it has generated a phenomenon called stress-shift, which, in effect, stands for an intrinsic change within the prosodic structure of a word, the purpose of which is to avoid arhytmicality (Roach 109). With this in mind, Roach points out that "one always speaks with some *degree* of rhythmicality" (Roach 109), maintaining that it is not so uncommon for English speech to lack the aforementioned features. The notion of strong isochrony[1] has, however, been repeatedly challenged and, consequently, there are differing views on the subject (Hardcastle 526). The binary division of languages is "more an ideal than a reality" since the timing of one's speech can only "indicate very general tendencies, not absolute distinctions" (Skandera 89).

[1] Isochrony is a perceptual phenomenon which implies the occurrence of regular "inter-stress intervals" (Hardcastle 524).

1.2 Assimilation

In fast colloquial speech, English speakers are prone to altering the phonetic forms of words so as to achieve a more continuous manner of speaking; this is referred to as the "contextual variability of speech sounds" (Hardcastle 312) in which the manner or place of articulation or voicing of the neighbouring sound forces a change in the phonetic properties of the original sound, which, as a result, bears more similarity to the neighbouring segment (Roach 110). The process takes place due to the "relatively short time span" a number of syllables might "have to be fitted into", causing them to become simplified (Skandera 89).

Assimilation mainly affects English consonants and is less salient in formal style, since the speaker concentrates intently on the individual elements of the utterance and, hence, is less likely to produce phonetically altered units (Roach 110). Two kinds of assimilation are distinguished – if the neighbouring sound influences the phonetic properties of the preceding sound, it is described as regressive assimilation; should the neighbouring segment alter the following sound, it is defined as progressive assimilation (Roach 111). To demonstrate, the expressions such as 'dead body' which would, under normal circumstances, be pronounced /ded ˈbɒdi/, transform into /de**b** ˈbɒdi/, signalling that the voiced bilabial plosive emerges in place of the former voiced alveolar plosive due to the influence of the following sound; this change is known as the regressive assimilation of place. The close vicinity of another consonant and its properties impact the articulation since, as Cruttenden asserts, "any phoneme is at least slightly different in every context" (308). In comparison with the previous type, the assimilation of manner is rather rare and, according to Roach "much less noticeable" (111). Roach highlights that the changes demanded by the neighbouring segment are inclined to occur rather regressively, that is to say the progressive assimilation of either manner or place is less likely to take place (Roach 111). Generally speaking, to ensure a flow of speech which is not heavily obstructed, the altered consonants, in most cases, undergo a change "towards an 'easier' consonant – one which makes less obstruction to the airflow" (Roach 112). To give an illustration, the voiceless alveolar plosive /t/ changes into the voiceless alveolar fricative /s/ in the phrase 'that summer' /ðæt ˈsʌmə/ which becomes /ðæ**s** ˈsʌmə/; this phenomenon predominantly occurs in fast colloquial speech (Roach 112).

With respect to TEFL methodology, the assimilation of place plays an important role since learners may make the mistake of mispronouncing grammatical endings '–s' and '–ed' and fail to acknowledge the occurrence of the preceding segment which affects the

pronunciation of the final sound. Generally speaking, if a fortis consonant is followed by the ending '–s' or '–d', the progressive assimilation of voice influences the voicing of the final sound and it is rendered voiceless (Roach 112). To demonstrate, the word form 'takes' would then be pronounced /teɪk**s**/, as opposed to 'digs' /dɪg**z**/ which includes a lenis sound followed by the voiceless fricative /s/, onto which voicedness is passed (Roach 112).

The assimilation of voice operates both progressively and regressively; the latter is less often employed and limited to only one type (Skandera 92). Point often overlooked, English only allows voicelessness to be passed onto the preceding sound and foreign speakers are oftentimes unaware of this rule which results in their speech being equipped with a "strong impression of a foreign accent" (Roach 112). To demonstrate, the voiceless velar plosive /k/ in the sentence 'I speak Galician' /aɪ ˈspiːk gəˈlɪʃən/ might be mispronounced /aɪ ˈspiː**g** gəˈlɪʃən/ owing to the linguistic influence of the speaker's mother tongue (Roach 112). What's more, the regressive assimilation of voice is exclusive to "word-final voiced fricatives" which occur before a fortis consonant causing the loss of voicing (Cruttenden 310). An illustrative example of the phenomenon can be seen in the expression 'with thanks' /wɪð θæŋks/ where the voiced interdental fricative transforms into its voiceless counterpart /wɪ**θ** θæŋks/; Cruttenden maintains that such a change is an "extension of the allophonic devoicing[2]" (310).

1.3 **Elision**

The function of elision and assimilation is to ensure that the rhythm of one's speech remains "natural and isochronous" (Skandera 94). Consequently, vowels are subject to being deleted if they occur in triphthongs, or, more precisely, if a vowel is preceded by a "closing diphthong", its second element is likely to be dropped (Cruttenden 314). For instance, the word 'hyaena' /haɪˈiːnə/ is liable to being reduced to /haˈiːnə/ (Cruttenden 314). What's more, the aforementioned triphthongs may also be entirely neutralised, leading to the omission of both the diphthong and subsequent vowel and the emergence of a completely new sound; phoneticians designate this phenomenon as 'smoothing' (Cruttenden 314). To exemplify, Cruttenden contrasts two semantically unrelated lexemes – 'mower' /ˈməʊə/ and 'myrrh' /mɜː/ – which, as a result of smoothing, are both articulated /mɜː/ and, thus, utterly indistinguishable from each other; such an utterance is, in effect, critically dependent on the linguistic context (314). Since word-final vowels are smoothed and reduced to single ones, intrusive /r/ may emerge as a linking sound, provided that the

[2] Devoicing stands for the production of a voiced sound "without the voicing" (Roach 49).

correct combination of neighbouring sounds is present. Moreover, Roach contends that elision is not to be mastered by non-native speakers of English, supposedly due to its marginal effect on fluency, however, he maintains it is advisable that assiduous attention be paid to its occurrence in "rapid, casual speech" (113). Word-initial syllables containing schwa which are "followed by a continuant and preceded by a word-final consonant" are also susceptible to elision, like the utterance 'he was annoyed' /hi: wəz **ə**ˈnɔɪd/ where schwa is, in fast speech, deleted /hi wəz ˈn̩ɔɪd/ (Cruttenden 314).

Another kind of elision affects the production of consonants, especially in certain sequences of sounds where it is thought to reduce the strain on articulation (Cruttenden 314). A typical example of consonantal elision is the disappearance of final /v/ in 'of', for instance 'lots of them' /lɒts **ə**v ðəm/ becomes /lɒts ə ðəm/, as Roach maintains (114). In spite of its undeniable significance and plethora of other examples where elision occurs, the central aspect of connected speech is introduced.

1.4 **Linking**

The isolated pronunciation of English lexical units differs considerably from the versions which occur in connected speech, as illustrated by the aforementioned aspects. Not only does a change take place in their internal structure, but they also create larger seemingly interconnected stretches of language by means of linking sounds (Roach 115). Linking, sometimes also referred to as liaison, is then a "transition or link between sounds or words" which "involves an unusual phonetic feature" (Skandera 57). The distinction between mechanical speech and actual human speech is recognised through the presence of those phenomena, some of which are limited to non-rhotic accents of English (Roach 115). The fast pace of one's speech is enabled owing to the ability to make "fewer and weaker" boundaries between individual words, whereas slow speech tends to generate "exaggerated" ones (Cox 158). Roach asserts that learners of English ought to use linking devices in their speech in order to be able to reach a higher level of fluency, labelling this the "practical importance of linking" (117). Equally, the French language makes use of linking phenomena as the pronunciation of French words "in isolation" may differ "in certain phonetic environments" depending on the word-final consonant (Skandera 58). Linking also constitutes one of the problematic areas for Czech learners as their speech appears discontinuous due to the "lack of linking" (Volín 63). In addition, Czech English abounds in glottal stops which are inserted "before words beginning with a vowel" which brings about problems in the acquisition of a native-like accent since English natives

employ glottal stops before vowels "only exceptionally", especially when expressing "contrastive emphasis" or the strong "emotional charge" of a lexical item (Volín 63). For instance, the utterance 'Give him only a part of it' would be unlikely to feature a glottal stop in native speech /ˈgɪv əm ˈəʊnlɪ ə ˈpɑːt əv ɪt/; however, a Czech person may be inclined to produce as many as 4 glottal stops, articulating /ˈgɪv hɪm ˈʔounlɪ ʔə ˈpaːrt ʔɒf ʔɪt/, as Volín points out (63). Generally speaking, three types of linking are distinguished – consonant-to-vowel linking, consonant-to-consonant linking and vowel-to-vowel linking; the following chapters will describe these types.

1.4.1 **Consonant-to-vowel linking**

Volín asserts that the way Czech speakers perceive morphemic boundaries "in connected English" may "not align with word boundaries" (64). This perceptual impression of a syllable shift is also referred to as pseudo-resyllabification since in speech the original syllabic boundaries are believed to be "rearranged" on a consonant-to-vowel basis, irrespective of the written form (Volín 64). To exemplify, utterances such as 'boxes of pills all over the place', normally articulated /ˈbɒk.sɪz.əf.ˈpɪlz.ɔːl.ˈəʊ.və.ðə.ˈpleɪs/, might be heard as /ˈbɒk.sɪ**.**zəf.ˈpɪl**.**zɔː**.**ˈləʊ**.**və.ðə.ˈpleɪs/ where the dots in bold indicate the impression of the change in the syllabic boundary (Volín 64). Hence, the consonants may form new syllables with the neighbouring vowels which, however, belong to a different lexical unit. The first part of the sentence 'boxes of' /ˈbɒk.sɪ**.**zəf/ clearly shows the detachment of the word-final consonant /z/ from the original word 'boxes' and its subsequent attachment to the immediately following vowel /ə/. That said, consonant-to-vowel linking is merely a perceptual phenomenon which only genuinely occurs in "really fast" speech as the "allophonic qualities of individual segments" do not correspond with the newly established syllables in spite of "the impression of the shift" being rather strong (Volín 64). Volín argues for the usage of consonant-to-vowel linking in teaching as it may prove helpful, suggesting students could be "asked to capture pseudo-resyllabification in their transcription" to become more familiar with it (64). As has been mentioned, the overuse of glottal stops in a Czech learner's speech may bring about problems since the failure to employ consonant-to-vowel linking may hamper fluency (Volín 63).

1.4.2 **Consonant-to-consonant linking**

In connected speech, consonants are also commonly linked together in order for the break between them to disappear (Hewings 58). A typical example of consonant-to-

consonant linking is the phenomenon of inaudible release which affects the English plosives and stands for the absence of the release stage of their production (Ogden 113). To demonstrate, ‘stop now’ [ˈstɒp̚ ˈnaʊ] features a “smooth change to the second” segment since the plosive /p/ is released without any plosion, leaving space for the nasal to be articulated without the interconsonantal break (Hewings 58). Alternatively, if the word-final sound of the first word is identical to the word-initial sound of the subsequent one, “one lengthened consonant sound is made”, e.g. ‘this summer’ /ðɪ**s** ˈ**s**ʌmə/ (Hewings 58).

1.4.3 **Vowel-to-vowel linking**

Vowel-to-vowel linking encapsulates a number of linking devices which are inserted between two vowels in succession “usually for ease of pronunciation” (Skandera 58). In the following chapters, we will firstly focus on the description of linking /w/, linking /j/ and linking /r/ and later on inspect intrusive /r/ in detail. This thesis is chiefly concerned with the intrusive variant of linking /r/ which is responsible for removing the articulatory gap between two successive vowels by appearing in intervocalic phonetic environments (Skandera 58).

Linking /w/ and /j/

Typically, linking /w/ is inserted between two vowel sounds, the first of which is either /uː, ʊ/ or a closing diphthong /aʊ, əʊ/ followed by virtually any vowel, e.g. ‘cow in the barn’ /ˈkaʊʷɪn ðə ˈbɑːn/ or ‘widow of a czar’ /ˈwɪdəʊʷəv ə ˈzɑː/ (Cruttenden 317). Similarly to the rest of the linking devices, it may be deleted and a glottal stop is uttered in its place instead, a generally preferred technique before stressed syllables (Cruttenden 317). The following example of vowel-to-vowel linking gives a special prominence to the other group of closing diphthongs, as they lead to the occurrence of linking /j/ (Cruttenden 317). In the same fashion, linking /j/ is articulated in intervocalic positions with a word-final /ɪ, iː/ or a diphthong /eɪ, aɪ, ɔɪ/ and a word-initial vowel in the first segment of the adjacent word, for instance ‘I owe you’ /aɪʲ ˈəʊ juː/ or ‘die in an accident’ /ˈdaɪʲ ɪn ən ˈæksɪdənt/ (Cruttenden 317). Cruttenden stresses that the linking element is not identical to the phonemic semi-vowel /j/ and illustrates this by citing a minimal pair: ‘my ears’ /maɪʲ ˈɪəz/ versus ‘my years’ /maɪ ˈjɪəz/ (317). Given these points, there is essentially no stigma associated with the articulation of these linking phenomena, rendering both of them apt to be produced in casual and formal speech. An enthralling finding has been discovered in New Zealand English (for more detail see 1.5.5).

Linking /r/

Linking /r/ is considered to be the most frequent linking device employed by non-rhotic speakers of the English language (Roach 115). Historically speaking, the device appears to have emerged along with the dramatic loss of rhoticity in Britain (Nevalainen 761). The eighteenth century saw the change take place "in the south-east of England", therefore the territories which were colonised thereafter, namely Australia, New Zealand and South Africa, are believed to have been non-rhotic from the very beginning (Trudgill 146). The notable absence of linking /r/ in rhotic accents, such as the General American, is caused by the articulation of post-vocalic syllable-final /r/, which, however, remains unpronounced "in the BBC accent" (Roach 115). The relationship of the alveolar approximant and the initial phoneme of the immediately subsequent word then brings about the occurrence of linking /r/ (Roach 115). If the word-final /r/ is preceded by a vowel such as /ɑː, ɔː, ə, ɜː/ or a diphthong /eə, ʊə, ɪə/ and the following expression includes a vowel in the onset of the first syllable, linking /r/ is highly likely to occur (Cruttenden 315). This fact is supported by the orthographic rules of spelling, which make its emergence relatively understandable and less odd than that of the intrusive variant which will be discussed later on (Cruttenden 315). For instance, the phrase 'far in the south' /ˈfɑː**r** ɪn ðə ˈsaʊθ/, where, normally, the word 'far' /fɑː/ does not feature an alveolar approximant, linking /r/ is articulated, as it is positioned post-vocalically and immediately before another vowel sound. Cruttenden gives a number of other examples, such as 'my dear Anna' /maɪ ˈdɪə**r** ˈænə/ and presents an intriguing case of linking which occurs within the phonetic structure of a single word, like 'roaring' /ˈrɔː**r**ɪŋ/, where the morphemic boundary separates the syllable-final /r/ from the suffix '–ing', causing the emergence of the phenomenon (316).

1.5 Intrusive /r/

As has been noted, the presence of linking /r/ in the speech of r-less speakers is "historically justified" (Cruttenden 316) due to the grapheme-to-phoneme correspondence, but there fails to be an etymological justification for the occurrence of the so-called intrusive /r/ (Broadbent 281). In fact, since 1476 when William Caxton introduced "the art of printing to England", English spelling has undergone very few radical alterations, leading to the discrepancy between written and spoken language as the graphic form reflects the pronunciation "used in the time from Chaucer to Shakespeare" (Skandera 58). The attribute 'intrusive', which is used to characterise this phenomenon, already implies a

certain disregard for phonetic convention and, according to Bente Rebecca Hannisdal, such "stigmatised features tend to be particularly avoided in more formal contexts" (178).

Intrusion can be described as the opposite of elision, since sounds are no longer deleted, but, conversely, added to the phonetic structure, resulting in at times semantically confusing utterances (Broadbent 281). Intrusive /r/ is particularly typical of sequences where word-final schwa is followed by a vowel, though it surfaces in combinations with other vowels as well, as illustrated in the following table which is based on Cruttenden's delineation of the phenomenon (316). The linking sound is inserted so as to prevent an articulatory break from arising; hiatus, as it is sometimes also called, is defined as a gap between consecutive vowels which can be deleted by a glottal stop or the insertion of a linking device, e.g. cooperate /kəʊ**ʔ**ˈɒpəˌreɪt/ (Skandera 58).

vowel	/ə/	/ɔː/	/ɑː/
isolated form	'idea' /aɪˈdɪə/	'saw' /sɔː/	'nougat' /ˈnuːgɑː/
case of /r/ intrusion	'idea of' /aɪˈdɪə**r**əv/	'saw it' /ˈsɔː**r**ɪt/	'nougat and chocolate' /ˈnuːgɑː**r**ən ˈtʃɒklɪt/
absence of /r/ intrusion	'idea to' /aɪˈdɪə tə/	'saw Mike' /ˈsɔː ˈmaɪk/	'nougat flavour' /ˈnuːgɑː ˈfleɪvə/

Figure 1. The occurrence of intrusive /r/, by vowel sound.

The examples of /r/ intrusion used in Figure 1 all demonstrate the insertion of the linking device between segments where it has no graphic representation and does not occur within the morphemic structure of a single word, but is rather representative of vowel-to-vowel linking on the word boundary. To put it in perspective, Cruttenden maintains that word-final /ɔː/ and /ɑː/ are less likely to be followed by intrusive /r/, since "the comparative rarity of potential contexts" renders the speakers more "aware of 'correct' forms" and, hence, less inclined to produce it (316). Consequently, the most common intervocalic environment in which intrusive /r/ is subject to articulation may be when preceded by schwa, e.g. 'Miranda and Mike' /məˈrændə**r**ən ˈmaɪk/, alternatively 'Angola in trouble' /æŋˈgəʊlə**r**ɪn ˈtrʌbl̩/. The limited number of words which include /ɔː/ or /ɑː/ in final position may also be the cause for the less frequent occurrence of /r/ intrusion (Foulkes 75).

Apart from being a feature of the non-r-pronouncing hemisphere of the English-speaking world, the close vicinity of another alveolar approximant in the "immediate preceding or following environment" more often than not prevents /r/ intrusion (Hannisdal

176). In view of this obstacle, ‘diaspora insipidly’/daɪˈæspərə ɪnˈsɪpɪdli/ would most likely not include a link in the form of intrusive /r/, but rather feature an articulatory break. Furthermore, it is believed that when followed by a stressed syllable, intrusive /r/ is almost never present, rendering it “virtually limited to unstressed vowels”; such a case would be ‘cola ad’ /ˈkəʊlə ˈæd/ (Hannisdal 175). In certain studies, intrusive /r/ seemed to ignore clause boundaries and appeared to be constrained “more by prosody than by syntax”; Hannisdal gives a number of examples: ‘…if the rebels do withdraw/*r*/, as Barnaby Phillips now reports’ – the link is made in spite of the comma separating the two subordinate clauses (Hannisdal 178).

1.5.1 **Word-internal /r/ intrusion**

Vowels in succession can be found within the phonetic structures of single words and they are, therefore, liable to /r/ intrusion as well, although intrusive /r/ is rather occasional on word-internal morphemic boundaries (Cruttenden 316). This case of linking is, however, frowned upon by many “language purists” and considered non-standard and incorrect; ironically though, even speakers with such conservative views frequently use it in spite of the great deal of conscious effort they expend to avoid it (Skandera 59). Skandera maintains that these people also take issue with the production of linking /r/, which is generally more widely accepted, and replace it with a glottal stop or no linking sound at all; linguists then brand this “over-correction”, or hypercorrection, of one’s natural speech (59). For instance ‘drawing’, which could be pronounced /ˈdrɔːɹɪŋ/, becomes /ˈdrɔːɪŋ/ in a reactionary person’s speech (Skandera 59). This “socially motivated suppression”, as Broadbent calls it (282), is typical for GB[3] speakers, yet predominantly only present in very careful speech (Skandera 63).

1.5.2 **Semantic repercussions of intrusive /r/**

Unlike other linking phenomena, intrusive /r/ has no support in the written form and its occurrence is, thus, rather arbitrary. It may be a source of misunderstandings, as its intrusive character impinges on spelling and may yield confusing homophonic sequences, e.g. ‘sore ears’ and ‘saw ears’ which, in a non-rhotic accent, may both be pronounced /ˈsɔːɹɪəz/ (Cox 158). The phrases are then entirely dependent on situational and linguistic context, since their meaning is completely different – ‘saw’ functions as a verb, while ‘sore’ is an adjective denoting ‘painful’. Alternatively, confusion may arise in the case of

[3] GB, or General British, is the standard English accent formerly known as RP, Received Pronunciation (Cruttenden 18).

certain combinations of first names and surnames, for instance ‘Linda Ice’ may, to the person’s dislike, be transformed into ‘Linda Rice’ /ˈlɪndəˈ**r**aɪs/ as a result of /r/ intrusion.

1.5.3 **The history of intrusive /r/**

The phonological conditions which ought to be satisfied in order for the linking device to emerge have been presented in the previous chapters; the following one will introduce the most significant mentions of intrusive /r/ throughout history.

The linking device dates back to “the end of the eighteenth century” and possibly transpired as a side effect of the then on-going changes to which the English language was adapting, namely the shift towards non-rhoticity which might have brought about both linking and intrusive /r/ (Romaine 476). At that time, linguists and observers of the sound were unsure about its status and often quarrelled about its scope, some labelling it a local variety characteristic of certain regions such as Norfolk or London, while others suggested it was used in the speech of “the illiterate” (Romaine 476). By 1902, the linking sound appeared to be pronounced even by educated scholars and then, some 50 years later, Daniel Jones concluded that it had started to emerge “even in districts and among classes where it has not been known, the younger generation is using it” (Romaine 477). In 1982, Wells predicted that it was “apt to occur in RP”, a fact which has ultimately proven to be true (Romaine 477). Intrusive /r/ is typical of most non-rhotic accents of English, it is therefore worth stressing that this phenomenon also occurred in the speech of the former American president John Fitzgerald Kennedy, an r-less speaker from New England, as his speech allegedly resembled “RP more closely than do other varieties of North American English” (Romaine 39). Consequently, /r/ intrusion is not exclusive to a closed group of various British accents.

1.5.4 **Intrusive /r/ in the General British accent**

The empirical data on the occurrence of the phenomenon remain to be sparse and Foulkes highlights that “previous accounts have been largely based on researchers’ own intuitions and informal observations” and not on an “accountable analysis of a large and principled sample of speech” (94). Perhaps the most in-depth study of the phenomenon in the General British accent was conducted by Dr. Bente Rebecca Hannisdal in 2006 when she wrote her dissertation thesis on the ‘Variability and Change in Received Pronunciation’. The author regarded it as “an empirical investigation of current RP as

spoken by television newsreaders", analysing in detail the sociolinguistic and phonological features of arguably the most prestigious English accent (Hannisdal 1).

British newsreaders are thought to be intensely "speech-conscious" people, as their occupation involves presenting reports to the whole of Britain (Hannisdal 171). In addition, they ought to be fairly knowledgeable, as they are required to *read* the texts which appear on the teleprompters; it can therefore be inferred that the occurrence of intrusive /r/ in their speech cannot be attributed to their not being familiar with the orthographic rules of spelling (Hannisdal 171). Hannisdal contends that "27 out of 30 news presenters" used intrusive /r/, leading to the belief that "/r/ intrusion is largely an unconscious process" which naturally emerges in one's speech without their noticing it (Hannisdal 171). In addition, intrusive /r/ is becoming more and more common among GB speakers, suggesting that there has been "some change in the attitudes towards" it (Hannisdal 171). Historically, "BBC newsreaders were strongly advised against using" the linking sound, this fact has, however, since become obsolete (Hannisdal 171). Contrary to Cruttenden's claim that the linking sound is most likely to be articulated after schwa, Hannisdal's data showed that "intrusive /r/ actually occurs significantly more frequently after /ɔː/ and /ɑː/ than after /ə/", with /ə/ attracting /r/ intrusion in 30.1% of the cases, while the other two vowels in 50.7% of the tokens (176).

1.5.5 **Intrusive /r/ in non-British English accents**

The available empirical data confirms the hypothesis that most non-rhotic accents use intrusive /r/ as a linking device, but it must be noted that not all of them use it in equal measure and identical environments.

New Zealand English is thought to be embracing the phenomenon; particularly the younger generation of speakers is prone to pronouncing intrusive /r/ in new intervocalic positions, setting a trend for future islanders (Preston 41). To demonstrate, in expressions such as 'now and then' or 'ploughing' New Zealanders have abandoned the widely used linking /w/ and begun to produce intrusive /r/ instead, articulating /ˈnaʊ**r**ən ˈðen/ and /ˈplaʊ**r**ɪŋ/, respectively (Preston 41). A study published in "The Wellington Working Papers in Linguistics" highlighted a growing tendency among the citizens of New Zealand to most often insert intrusive /r/ subsequently to /ɔː/, but less frequently after /ə/, again challenging Cruttenden's claim (Warren 57).

Moreover, in another study focused on the occurrence of linking /r/ in Australian English, Felicity Cox makes a mention of the fact that the variant is "typical of most non-

rhotic varieties of English", as both linking /r/ and its intrusive counterpart are regularly used by Australians, too (157). Incidentally, in certain areas of the United States inhabited by non-rhotic speakers such as "eastern New England and New York City", intrusive /r/ also occurs as a linking element (Algeo 26). In contrast, southern American accents with non-rhotic features do not exhibit the same characteristics and, as a result, do not produce even linking /r/ (Algeo 26). The location of New England is illustrated in Figure 2 where it is highlighted in blue colour.

Figure 2. *New England Commonwealth*. Digital image. *Fallout Wiki*. 25 Mar. 2017. <http://vignette3.wikia.nocookie.net/fallout/images/8/8f/FO_New_England_Commonwealth.gif/revision/latest?cb=20100501182844>.

1.5.6 **Social factors**

The studies on the sociolinguistic constraints of /r/ intrusion which have been undertaken to date have not discovered "any significant social patterning in the use of intrusive /r/" (Hannisdal 172). Still, it is noteworthy that certain tendencies have, in fact, been described in relation to the phenomenon. Hannisdal, in the aforementioned study, detected an inclination towards the distribution of intrusive /r/ among men, and a lower frequency of use among the opposite sex; the margin was, however, too narrow to be recognised as a generally valid fact (Hannisdal 171).

Interestingly, in 1997 Paul Foulkes found that in the area of Newcastle "the production of linking /r/ is decreasing" among the younger generation (81). The usage of intrusive /r/ in the same region was also rather low, though he admitted that there were

socio-economic factors which played a role in its production; the participants who were classified as working class articulated intrusive /r/ more frequently than those belonging to the middle class (Foulkes 82). “Class effect is in fact highly significant” in the presence of intrusive /r/ in spite of there being differences between individual regions such as Derby and Newcastle, as Foulkes points out (83).

An unexpected finding was reported in the study – in Newcastle, where, on the whole, most speakers avoided the phenomenon in “conversational style”, the middle class participants articulated intrusive /r/ when reading word-lists in 50% of the cases (Foulkes 83). Foulkes concluded that the more frequent occurrence could be attributed to the middle class speakers’ association with the phenomenon since it is commonly used on TV and in the media and may therefore be interpreted “as prestigious or advantageous” (84). This is somewhat bewildering, considering the fact that in careful style it is generally believed to be stigmatised and not pronounced as often (Foulkes 84). To conclude, Foulkes asserts that the “variation in intrusive /r/ appears to be free” and the linking sound emerges variably, “depending on speech rates, contextual style, and no doubt also random factors” (88).

1.5.7 **Summary**

The phenomenon of intrusive /r/ is frequently employed by non-rhotic speakers of the English language. It exclusively occurs after the vowels /ə, ɔː, ɑː/ although there does not appear to be a consensus among phoneticians about the most salient intervocalic environment giving rise to its articulation. The linking device may also emerge word-internally, connecting two successive vowels in order to prevent an articulatory break from arising; this feature is, however, considered non-standard. Similarly to linking /r/, the sound is believed to have originated in the eighteenth century when English began to discard rhoticity, spreading the non-rhotic variety to several British colonies a century later. As far as social constraints are concerned, intrusive /r/ is thought to be influenced by a variety of factors but a significant, clear correlation has not been discovered in any of the studies conducted to date. Before the practical part of this thesis focused on the social conditioners connected with the phenomenon is presented, we will explore the field of sociolinguistics and sociophonetics which constitute an important basis for the subsequent study.

2 Sociolinguistics

A major concern of this thesis is to describe a potential correlation between the occurrence of intrusive /r/ in native speech and certain social structures; in other words, to investigate whether and how the factors such as regional background and social class predispose speakers to produce the orthographically unrecorded linking sound.

Sociolinguistics is a fairly broad science which could be defined as the "study of the social uses of language" (Wardhaugh 11). It is not only concerned with the language of larger groups, such as cities, countries or nations, but also with the manner in which "individual speakers use language" since people universally alter their way of speaking "depending on who they are with and what the situation is" (Meyerhoff 1). Sociolinguistics is also concerned with "how language can reveal social relationships", meaning that style and register have a substantial impact on our speech (Van Herk 3). The branch of linguistics is, hence, a fiercely multi-layered field that requires a great deal of inspection as it strives to provide a "motivated account of the way language is used" with an enormous amount of variation and variability (Wardhaugh 11). The only constant a sociolinguist can reckon on is the fact that language is subject to continuous change, one which is rather subconscious and does not occur systematically (Meyerhoff 2). Some hold the view that the study focuses on "what variation tells us about language and speakers' 'knowledge' of language", implying that sociolinguists intend to enquire their subjects about the nature of the aforementioned changes, often, however, to little or no avail owing to their being more or less subliminal (Wardhaugh 12).

Miriam Meyerhoff poses a pertinent sociolinguistic question convenient for the purposes of this thesis: "What kind of social information do we ascribe to different forms in a language or different language varieties?" (3). Indeed, language and society are co-dependent and intertwined, thus, the study of speech ought to be approached through a social lens which gives rise to the subtle nuances that establish individual identities.

2.1 Free variation

Unlike structured variation which is always "linked to other factors" (Van Herk 3), free variation is a linguistic idea that there are "no clear linguistic constraints" which could be attributed to the usage of different variants of language (Meyerhoff 10). It is also thought to be "completely arbitrary and unpredictable" (Van Herk 3). The concept is, however, rather short-sighted as it fails to acknowledge the extra-linguistic reality that exerts its powerful influence on the speaker, subconsciously compelling them to employ

alternative linguistic units (Meyerhoff 10). Consequently, sociolinguists think of variation as always "constrained by some factor relevant to the context", whether it be a spatial, social or situational one (Meyerhoff 10). To illustrate this point, the utterance 'I saw it' /ˈsɔːɹɪt/ may involve a link in the form of intrusive /r/, or, to mark the morphemic boundary in a formal situation, a glottal stop between 'saw' and 'it' /ˈsɔːʔɪt/. The choice represented by the aforementioned facts is then regarded as free variation. In view of the supposed freedom to choose, it must be noted that there was a social conditioner which necessitated a more formal form and, therefore, the very of notion of the word 'free' was utterly negated.

Furthermore, the phenomenon of free variation is thought to encapsulate two rudimentary kinds – interspeaker and intraspeaker variation, as Meyerhoff points out (17). Interspeaker variation is "measured between different speakers (individuals or social groups)", while intraspeaker variation suggests that the language of individual speakers transforms "with different interlocutors, or even within a sentence" (Meyerhoff 17). The latter therefore represents "the difference in the way a single speaker talks in two or more different situations" (Van Herk 104). In one of William Labov's experiments, he attempted to discover how exactly the intraspeaker variation operates and he arrived at the conclusion that it "reflected and constructed an underlying social opposition" between "locals and non-locals", asserting that in a region which became flooded with tourists in the summer season intraspeaker variation functioned as a distinguishing tool between permanent residents and temporary visitors (Meyerhoff 21). That is to say, the way locals communicated with one another was markedly different from the way they verbally interacted with the holidaymakers. This is very important for the outcome of this study, since there is a plethora of factors with the potential to influence the final results.

2.2 Sociophonetics

As has been mentioned, sociolinguistics aspires to establish clear correlations between social structures and the language they are reflected in. The examined variables can be of many kinds, e.g. lexical, syntactic or even stylistic. Sociophonetics then constitutes the equilibrium of social conditioners and phonetics and aims to implement the "principles, techniques, and theoretical backgrounds of phonetics with those of sociolinguistics" (Hardcastle 656). The discipline is thought to have emerged in the 1970s but had been marginalised by linguists until the 1990s when it started to be become "an eclectic field with an expanding agenda" (Docherty 410). In a narrow sense, its cardinal

objective is to detect the primary sources of socially-constructed variation and analyse it from various perspectives; sociophonetic variation is then thought to correlate "with social factors like speaker gender, age, or social class" (Docherty 410). Furthermore, the marked sociophonetic patterning is further explored, with special emphasis on how it is "learned, stored cognitively, subjectively evaluated and processed in speaking and listening" (Hardcastle 657).

2.3 Sociophonetic variation

In order to grasp sociophonetic variation, it is vital to be able to differentiate between an utterance and a sentence. While sentences are graphically recorded and, therefore, more or less stabilised in their form, the utterances which are actually pronounced show enormous variation depending on the bulk of factors affecting it (Hardcastle 657). Sociophonetic variation stands for "a pattern of behaviour" acquired as a result of "using language in social interaction"; such variation is therefore largely arbitrary since it is "wholly the product of social construction" (Docherty 411).

Generally speaking, the numerous realisations are thought to be "linguistically equivalent" as the meaning they convey is not altered by the manner in which they appear (Hardcastle 657). To demonstrate, if one were to decide to ignore standardized spelling rules and, say, commence recording lecture notes in IPA so as to authentically reflect reality, it would be a labour of Sisyphus. The "indexical information" encoded in speech merely enriches the "semantic information" and provides profound insight into the person's "background, pragmatic intent and emotional state" (Hardcastle 658). For that reason, recipients might swiftly recognise if a speaker is of Moravian or Bohemian descent or, alternatively, if they are anxious owing to the tone of their voice after only having conversed with them for a few minutes. Furthermore, certain natural categories such as age and gender are evident in the "voices of adult males, adult females and children", as there is a clear difference in the "fundamental frequency and formant spacing" of their voices; the listener automatically deciphers the subtleties in their speech and may react in a number of ways without explicitly being told the sex of the sender (Docherty 411). Cognitive associations between a speech mannerism and a social structure such as class or gender are commonly, but not categorically, "registered in memory"; the human brain therefore remembers such patterns and may be able to index them to "individuals and classes of individuals" (Bybee 21).

Common denominators are sought in order to determine the source of interspeaker variation; inspecting the various possible accents and their internal structure often leads to some form of social stratification ascribed to the distribution of sociophonetic variation (Hardcastle 658). That said, it may prove impossible to "determine whether an indexed category" stems from a social structure or whether it is "non-learned behaviour" (Docherty 412). Socio-economic groups seem to exhibit different articulatory features, consequently, a wealthier individual may be prone to pronouncing postvocalic word-final <r> non-rhotically, while a less privileged one may opt for a rhotic articulation of the grapheme, in predominantly r-less accents of English that is (Hardcastle 658). It is, however, close to impossible to "disentangle socially-influenced variation" from the one resulting from organic factors without addressing their interconnectedness; sociophonetics, hence, aims to study variation in which "the indexed factor is at least *in part* the product of social construction (Hardcastle 659). Such a hypothesis is crucial for the study conducted in the practical part of this thesis.

2.3.1 Sources of variation

A systematic qualitative analysis of collected data may point to the source of sociophonetic variation and clarify what exactly it is constrained by (Hardcastle 659). According to *The Handbook of Phonetic Sciences*, variant selection displays "structured heterogeneity"; it is therefore systematically infused with socially constructed determiners (Hardcastle 659). While the following chapters introduce the various social groups which may correlate with speech variation individually, it is vital to stress that "correlation might be with more than one social category simultaneously" (Docherty 411).

Social classes and communities

The multidisciplinary field seeks to understand the notion of class and chiefly its manifestation in sociophonetic variability since copious studies have confirmed its immense significance for various speech phenomena (Hardcastle 660).

Class may function as a contributory factor in variant selection since dominant groups, generally represented by the upper and middle classes, tend to "define what is and what is not 'standard' and 'correct'" (Coupland 312). This fact is congruent with the hypothesis that working class speakers might be more likely to produce non-standard forms, while a middle class person might tend to use correct, standard ones as they may be more aware of the prestige associated with them (Coupland 312). The British then have

"highly regular patterns of judgement" of the non-standard accents (Coupland 312). Not to forget, social groups may also be founded "at a local level", e.g. joining a book club or the school choir, but they are subject to "more widespread patterns of social practice", such as the idealisation of celebrities among teenagers or their "choices in behaviours, clothing and slang terminology" (Hardcastle 661). Interestingly, variant distribution is usually a strategy for "the construction and maintenance of identities", speech being one of the tokens of identity as different collective units "differentiate themselves from their peers" by employing distinct lexical and phonetic elements (Hardcastle 661). Correspondingly, a person's speech may be affected by the "professional group to which they belong", for instance the word 'route' /raʊt/ in "army usage vs. /ruːt/, more generally" (Mompean 1). It is becoming considerably more indisputable that the variation in use is caused by a "degree of choice – whether conscious or subconscious" – to delimit their "personal stance, identity and communicative function" (Hardcastle 661).

Age and development

The adherence to specific phonetic forms is fairly evident among older speakers since they tend to be rather conservative and traditional in their use of language; this may be owing to a "long-term social convention" or possibly "major historical or social events" (Hardcastle 662). On the other hand, children's speech evolves much more dynamically and is largely impacted by the "family setting" which is heavily reflected in their manner of speaking (Hardcastle 662). In fact, sociophoneticians noticed a striking resemblance in the way mothers and their toddlers articulated "pre-aspirated voiceless stops in Newcastle English", verifying the belief (Hardcastle 662). Apart from this, William Labov asserts that "children learn to speak differently from their parents" (85). In adolescence, a more conspicuous metamorphosis takes places "away from the family model" and the importance of friends and acquaintances increases, leading to the "high usage of non-standard forms" (Hardcastle 663). Certain non-standard features are typically associated with younger speakers, such as the phenomenon "variously referred to as 'uptalk' or 'high rising terminal'" which has been found to occur in the USA, Australia, New Zealand and England (Docherty 415). Incidentally, neologisms may be mispronounced by the older generation since many of them encounter them "only in writing" (Wells 6). To exemplify, in one of J.C. Wells' studies, the word 'gigabyte' /ˈgɪgəbaɪt/ was, in many cases, articulated /ˈdʒaɪgəbaɪt/ or /ˈdʒɪgəbaɪt/ by the over-65's (6).

Gender and identity

The physiological differences between male and female bodies are unconcealed; the organs which are phonetically salient, mainly the vocal tract, are logically larger in men than in the opposite sex which leads to the "acoustic differences" in their speech (Hardcastle 663). In view of the binary distinction, a study carried out by Gordon and Heath in 1998 discovered that "women tend to lead vowel changes towards the close front region", as opposed to males who allegedly force "changes involving vowel retraction and rounding" (Hardcastle 663). Furthermore, Trudgill claimed that women were more reserved in their use of language due to their wanting "to enhance their social position" (Eckert 249). Penelope Eckert disputes the fact that "women's speech is more conservative than men's" (247), contending that one cannot "claim any kind of constant constraint associated with gender" since variation is far more complex and differs in every speech community (248). In like manner, speech is more of a by-product of the "social identity" one wishes to belong and not a rigid set of biological prerequisites with which one is born, sex included, and it ought to be studied from all perspectives (Hardcastle 664).

Regional factors

Similarly to the other sources of variation, the regional one is not to be approached sans context but with a clear understanding of locality and its scope, as it may not be simply defined by borders or demarcation lines but may transcend them socially and psychologically (Hardcastle 665). "Such factors may include political boundaries and differing orientations towards larger economic centres" and with the world becoming more and more globalised, regional varieties gradually lose cohesiveness and adapt to the changing circumstances by inviting new phonetic properties into their systems (Hardcastle 665). Nevertheless, certain regions do retain their individual characteristics. To illustrate this point, J.C. Wells discovered that, for instance, northern English speakers tended to avoid plosive epenthesis in the word 'chance', pronouncing /ʧɑːns/ in 90% of the cases instead of /ʧɑːn**t**s/ like the southerners who participated in the study (10). Alternatively, General American (GA) can be contrasted with GB in the word 'tomato'; American speakers usually say /təˈmeɪˌtoʊ/, as opposed to the British who prefer /təˈmɑːtəʊ/ (Mompean 1). As concerns the phenomenon of intrusive /r/, it will be engrossing to see whether the rapid developments in technology result in a more widespread usage of the linking sound, considering its rise across all non-rhotic accents.

PRACTICAL PART

The practical part of this thesis contains a small-scale study which was conducted to inspect the manner in which /r/ intrusion is manifested in native speech and to confirm or deny the findings suggested in the theoretical part. Particularly, two sociolinguistic aspects that might have an influence on the occurrence of the target phenomenon – regional background and social class – were investigated. The following hypotheses were constructed and further examined:

a. The phenomenon of intrusive /r/ is more likely to be employed by working class than middle class speakers.
b. Seen from the regional perspective, the occurrence of intrusive /r/ will be more frequent in the speech of non-rhotic speakers.

Furthermore, we will explore the linguistic environment in which the target phenomenon occurs, whether it tends to be produced most frequently after schwa as it is mentioned in Cruttenden (316) or rather after /ɔː/ and /ɑː/ as Hannisdal states (176). A large degree of variation and variability is expected to arise.

3 Method

In the experimental part of the thesis, the participants were required to produce an audio recording which contained their reading a short text. In addition, a simple questionnaire was designed to serve the purposes of this thesis and retrieve background information about the speakers, chiefly their gender, regional background, age, education and the social class they belong to (see Appendix 4).

3.1 Text preparation

The reading consisted of two cardinal parts the first of which was a carefully contrived list of 30 sentences where a total of 31 tokens were incorporated. The second part of the reading task took the form of an informal dialogue which depicted an encounter between two acquaintances and encompassed 6 additional tokens of intrusive /r/, bringing the full amount of tokens to 37.

The theoretical part of this thesis served as an important source for selecting the phrases as the literature cited in it abounds in examples of /r/ intrusion which were utilised in the text. In addition, original instances of potential /r/ intrusion were composed so as to further investigate the words with the identical word-final vowel sounds and assess their

effect on the overall production of the linking device. Approximately 50% of the phrases which may include intrusive /r/ used in the text were taken from the literature mentioned in the theoretical part, for instance sentence no. 5 ‘Linda absolutely adores nougat and chocolate’ /ˈnuːgɑːrən ˈtʃɒklət/ or sentence no. 4 ‘I’d like a vodka and tonic, please’ /ˈvɒdkərən ˈtɒnɪk/; the phrases can be found in Cruttenden (317). The other half were created by the author himself, for example the lexical items used in sentence no. 24 included the name of a US federal state ‘Arkansas introduced a new law’ /ˈɑːkənsɔːrɪntrəˈdjuːst/, which was followed by a word-initial vowel and, hence, possibly subject to /r/ intrusion. The words were chosen in accordance with the theoretical framework which suggests that only lexical items with word-final /ɔː, ɑː, ə, aʊ/ are liable to /r/ intrusion. Therefore the text reflected this fact and the tokens were distributed in proportion to the frequency with which they are believed to occur in rapid speech. The central focus lay on the most salient phonetic environments represented by word-final /ə/ and /ɔː/ and, to a lesser extent, on the other vowels /ɑː/ and /aʊ/ which may attract /r/ intrusion on a smaller scale. All in all, there were 15 tokens of the mid-central vowel /ə/, 16 tokens of /ɔː/ and 5 tokens of /ɑː/. A single case of the word-final diphthong /aʊ/ was featured in the reading specifically to examine whether its increasing popularity amongst New Zealand speakers has penetrated into the other accents of English, notably Australian English. In like manner, the open back vowel /ɑː/ appeared in five sentences only as it proved extraordinarily difficult to unearth English words which include it, since the majority of lexemes with word-final /ɑː/ not represented by <ar> are of foreign origin and only a few are regularly used by native speakers. Interestingly, rhyming dictionaries were put to use when drafting the reading task with the intention to increase the number of possible word-final /ɑː/ tokens.

The tokens in the text mirrored the complexity of the linking device and, consequently, appeared in diverse phonetic environments. The potential occurrence of a word-internal link was scrutinised in 3 cases; in sentence no. 26 ‘I’m not very fond of drawing’ /ˈdrɔːrɪŋ/, in sentence no. 8 ‘The mosquitoes are gnawing at me’ /ˈnɔːrɪŋ/ and in sentence no. 28 ‘The Kafkaesque terror of the endless interrogations’ /ˌkɑːfkəˈresk/. Also, lexical variation and its effect on the production of the sound were examined in cases where a proper noun was subject to being altered, e.g. ‘Pamela Evans is here’ /ˈpæmələˈrevənz/; the semantic repercussions thereof have already been discussed in the theoretical part (see 1.5.2). Particular emphasis was placed on the fairly common utterance ‘I saw it’ /aɪ ˈsɔːrɪt/ since it occurred both in the first and second part of the reading.

Furthermore, sentence no. 15 featured a clause boundary on which intrusive /r/ is thought to occur less frequently: ‘I thought John’s from America and I was wrong’ /əˈmerɪkə**r**rænd/. The full list of words between which intrusive /r/ may be produced and which were used in the reading task is shown in Figure 3; for the whole sentences please see Appendix 2.

vowel	**/ə/**	**/ɔ:/**	**/ɑ:/**	**/aʊ/**
	‘Miranda and’ /məˈrændə**r**ən/	‘saw Adam’ /ˈsɔːˈ**r**ædəm/	‘spa at’ /ˈspɑː**r**ət/	‘now and then’ /ˈnaʊ**r**ən ˈðɛn/
	‘vanilla ice’ /vəˈnɪlə ˈ**r**aɪs/	‘straw in’ /ˈstrɔː**r**ɪn/	‘bra on’ /ˈbrɑː**r**ɒn/	
	‘vodka and’ /ˈvɒdkə**r**ən/	‘gnawing’ /ˈnɔː**r**ɪŋ/	‘bourgeois upbringing’ /ˈbʊəʒwɑː ˈ**r**ʌpˌbrɪŋɪŋ/	
	‘Pamela Evans’ /ˈpæmələˈ**r**evənz/	‘raw eggs’ /ˈrɔːˈ**r**egz/	‘nougat and’ /ˈnuːgɑː**r**ən/	
	‘idea of’ /aɪˈdɪə**r**əv/	‘paw up’ /ˈpɔː**r**ʌp/	‘Utah is’ /ˈjuːtɑː**r**ɪz/	
	‘Russia and’/ˈrʌʃə**r**ən/	‘saw it’ /ˈsɔː**r**ɪt/		
	‘China in’ /ˈʧaɪnə**r**ɪn/	‘Law and’ /ˈlɔː**r**ən/		
	‘Malta is’ /ˈmɔːltə**r**ɪz/	‘thaw out’ /ˈθɔː**r**aʊt/		
	‘America and’ /əˈmerɪkə**r**ən/	‘jaw on’ /ˈʤɔː**r**ɒn/		
	‘camera in’ /ˈkæmərə**r**ɪn/	‘Arkansas introduced’ /ˈɑːkənsɔːˌ**r**ɪntrəˈdjuːst/		
	‘extra information’ /ˈekstrəˌ**r**ɪnfəˈmeɪʃən/	‘drawing’ /ˈdrɔː**r**ɪŋ/		
	‘supernova appeared’ /ˌsuːpəˈnəʊvə**r**əˈpɪəd/	‘flaw in’ /ˈflɔː**r**ɪn/		
	‘Kafkaesque’ /ˌkɑːfkəˈ**r**esk/	‘law of’ /ˈlɔː**r**əv/		
	‘Theresa and’ /təˈriːzə**r**ən/	‘Warsaw, actually’ /ˈwɔːsɔːˈ**r**ækʧʊəli/		
	‘Linda absolutely’ /ˈlɪndəˈ**r**æbsəluːtli/			

Figure 3. The full list of words between which intrusive /r/ may be inserted used in the reading task.

3.2 **Participants**

As has been mentioned, the primary objective of the sociophonetic research was to observe whether and to what degree social constraints affect the emergence of the examined phenomenon in the speech of native speakers of English. In the course of the preparation process, roughly 50 users of English were directly inquired about taking part in the project via email while another 164 people were addressed on a Facebook forum which houses expats from several English-speaking countries. What's more, the author's international friends attempted to facilitate the procurement of suitable candidates by approaching their own family and acquaintances. In spite of having appealed to more than 200 men and women, only 20 actually agreed to do the recording, rendering the results of the study inevitably reliant on a lower number of recordings than initially envisioned. The lack of respondents might be attributed to many a reason, for instance their being timid, engaged with work, reluctant to use technology or expecting financial compensation.

For the purposes of this thesis the subjects were divided into 4 geographical groups based upon their origin. The British and Northern Irish participants were assigned to the UK category, the North Americans and the Australians formed their own groups and there were two Irish speakers as well whose speech was investigated separately. The UK group featured 9 speakers from various parts of the country (for more detail see 4.3), therefore a higher number of subjects would be required for the comprehensive study of their speech. In contrast, the 5 Australians were far more congruous a group by token of the fact that three of them came from Adelaide and the other two from Sydney and Brisbane. It ought to be noted that they all seemed to speak with the standard Australian accent with some, but not substantial degree of variation. Moreover, there were two Irish speakers and 4 participants came from North America, namely 3 women from Minnesota and 1 speaker from Toronto, Canada. The following chart illustrates the proportional representation of the aforementioned division.

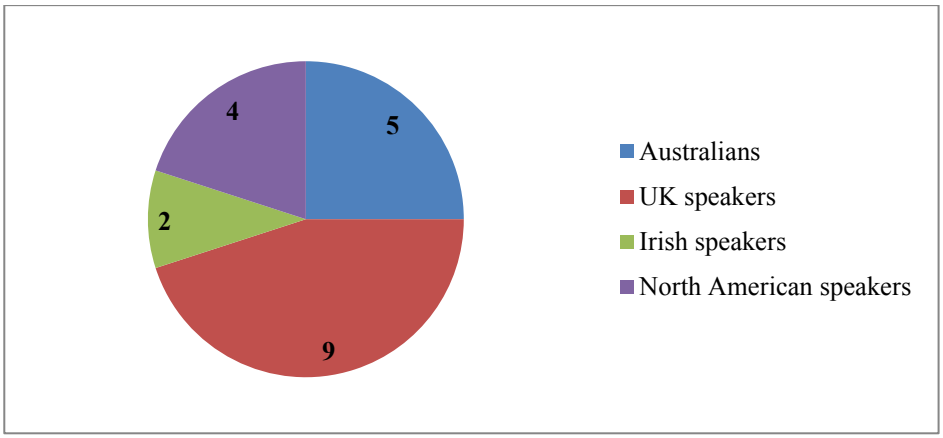

Figure 4. The geographical division of the participants.

A total of 9 women consented to take part in the sociophonetic research and there were also 11 members of the opposite sex. As concerns education, all the speakers were in possession of a university degree and 55% of them had had some experience in teaching English as a foreign language. The vast majority of the subjects were between 20 and 30 years of age with the exception of a 64-year-old English lady from South London. On the whole, there were 8 rhotic speakers – four in the North American group, two in the Irish group and two participants from Northern Ireland and Scotland whose speech was analysed along with the rest of the UK group. In terms of the non-r-pronouncing respondents, the study featured 12 non-rhotic users of English from Australia and Great Britain.

Interestingly, more than 65% of the participants had spent at least one year abroad which, as they all personally pointed out, may have had an impact on their pronunciation. Several speakers suggested they had lost their accent due to continuous foreign language exposure and maintained their way of speaking had undergone dramatic changes and resembled more than one variety of English. For instance, the Australian male from Brisbane contended his accent exhibited features of the London accent since he had lived in the British capital for 6 years prior to moving to Prague. There were two female participants whose pronunciation could be contrasted with that of their brothers either of whom had taught in the Czech Republic for more than a year, resulting in an intriguing glimpse at the side effects of being an expatriate.

Social class membership was also taken into account as one of the relevant social conditioners which could cause /r/ intrusion. Around 45% of the natives identified as working class while the remaining 55% fell between the more prominent middle class members. When analysing the data, the principal attention will be directed at the interconnectedness of the phenomenon of intrusive /r/ and the social stratification within the respective geographical groups. The socio-economic status has been commented on in

the theoretical part and will be further investigated in relation to the linking device since it is thought to be a determining factor in its emergence. The following pie chart shows the proportional representation of social classes based on the information provided by the speakers.

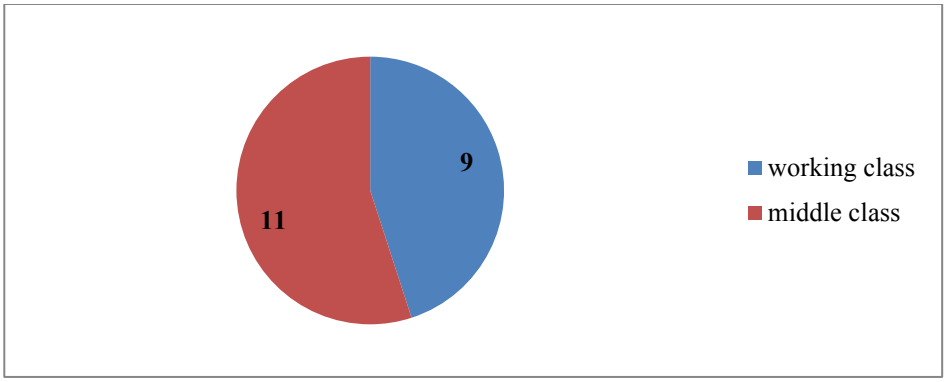

Figure 5. The division of the participants by social class membership.

3.3 Procedure

Prior to the recording process the subjects had been notified of the significance attached to the collection of authentic data. It had also been repeatedly emphasised that the sociophonetic study was aimed at the properties of fast colloquial speech. This was done to ensure the material obtained would not reflect the slow careful speech typical of school-related reading tasks but rather resemble an informal conversational manner of speaking. The subjects had been further apprised that the data would only be used for academic purposes and all the information would remain confidential and anonymous. They were then asked to read the entire text silently before commencing the recording. In case they made a slip of the tongue, they had been instructed not to continue reading but rather start again from the beginning of the sentence to avoid the disruption of the speech flow. The participants had not been informed about the examined feature since their awareness of the phenomenon would have yielded unreliable results. The complete instructions given to all participants can be found in Appendix 1. As for the enquiries, the questionnaires had been drawn up to classify the speakers into groups and facilitate the subsequent data analysis upon which the study depends. They were either completed via email and forwarded to the author or filled out during the recording sessions with them.

The twofold character of the research necessitated two slightly different approaches. Firstly, merely 2 subjects chose to meet with the author in person to produce the recordings while the remaining 18 preferred to record themselves; these respondents generally cited scheduling conflicts as the reason for not arranging face-to-face meetings.

For the most part, their decision did not affect the quality of the material and was, thus, not opposed. In one case an electrical glitch negatively impacted the audibility of the recording and the subject was kindly asked to re-make it. The subjects who opted for recording on their own were instructed to read both parts of the dialogue. They were sent the questionnaire via email and, in most cases, attached it to the response with the audio enclosed. The larger group of respondents generally used their smartphones with good-quality built-in microphones to make the recordings which did not hamper the subsequent perceptual analysis. Moreover, the two speakers who agreed to a direct encounter were interviewed by the author in person; the recordings were then made with a studio microphone on the author's computer which guaranteed high-quality data. It is noteworthy that the sessions were held in a quiet room to minimise the risk of noise disruption and the unassisted subjects had been cautioned to complete the reading task in a reticent environment as well. In spite of that, the author was unable to secure a sound-proof recording booth ideal for such undertakings and some respondents failed in part to satisfy the conditions appropriate for recording. Consequently, all the recordings contained a buzzing background noise which, however, was not detrimental to the data nor did it prevent its being inspected.

3.4 **Analysis**

The optimal technique for analysing the recordings was the perceptual analysis of the material which was carried out in several stages so as to ensure the reliability of the evaluation.

The first step consisted of a preliminary evaluative analysis with the aim to determine the speakers' degree of rhoticity which was vital for the following stage. The author preferred to mark down the individual tokens on paper using coloured pens and highlighters. The rather tactile approach was adopted as it rendered the notes uncluttered and better arranged than a complicated Excel table. At first, three distinct categories were assigned to each token – pronounced, not pronounced and something in between – and were quantified as follows: 1, 0 and 0.5 respectively. The criteria were selected in accordance with the trends the recordings seemed to indicate, notably the 'in between' criterion since it was at times somewhat problematic to decide whether the sound had, in fact, been articulated or whether it was absent from the audio. In the event of doubt, the material was re-played at a later date, mostly in two or three days, to re-examine the unresolved cases. Due to the tendencies which transpired during the recording process,

special emphasis was then placed upon the differences between Australian English and several UK accents. Moreover, the author called upon one of his colleagues to perform a secondary analysis in order not to base the conclusion solely on their own auditory-centred assessment. The fellow researcher received the recordings via email and followed a similar approach to the author's when analysing them. The final results then amounted to the numerical average derived from the two separately conducted analyses. The 'in between' criterion was then removed in the next stage and ascribed to one of the two categories – pronounced or not pronounced – based on the consensus of the two researchers. Another key point is that the two parts of the reading were initially examined separately. Nevertheless, since the dialogue was, in 90% of the cases, not performed in pairs as intended but mostly read by one speaker, the two parts happened to be very similar. Hence, the text was scrutinised as a whole rather than two stand-alone sections.

As has been stated, several of the participants failed to fully uphold the standards of record-making and consequently the author was forced to obtain software which would enhance the quality of the material and accentuate certain sections. Noise elimination was attempted and FX effects were used to alter the automated frequencies of the recordings, mainly the output dryness and gain which led to the voice being much clearer and more audible. The programme also allowed for frequent rewinding and pace alteration which was especially helpful due to the speech being rapid and hard to keep up with; it enabled the researchers to review the undecided cases and determine whether the sound had, in fact, occurred or not. In the next stage, the extracted data was inserted into an Excel table and divided into four columns depending on the word-final vowel sound /ɑː, ɔː, ə, aʊ/; each speaker then received a score for all four parts and these were then added up and divided by four to arrive at the total score.

4 Results

The following chapter will present the results of the perceptual analysis with respect to the hypotheses which draw on the current research findings and the theoretical framework available to the author. The phenomenon of intrusive /r/ will be examined from several perspectives, chiefly, however, with emphasis on the partakers' socio-economic background and place of birth or long-term residence. As has been noted, the subjects were subdivided into four geographical groups and, thus, will be inspected within the purview of their individual features before a general conclusion is formulated. Moreover, the secondary aim of this thesis to examine the likelihood with which the graphically unsupported sound is to emerge in four distinct phonetic environments realised by the word-final vowels mentioned in the theoretical part will be investigated as well.

Overall, the results revealed that the target phenomenon occurred in 12 out of the 20 recordings (60%) and was produced in every fifth token upon the average (21%). The individual analyses of the geographical groups included in the following chapters describe the concrete tendencies and trends which were observed in the amassed data.

4.1 Australian group

Arguably the most enthralling group of the four consisted of 5 Australia-born natives three of whom were residing in Prague at the time of the study. Interestingly, these males were also EFL teachers and they all had obtained university degrees similarly to the two remaining ladies. One of the female speakers was living in London and it is believed to have influenced her accent. Her sister, on the other hand, remained in her home country. Thanks to the communication skills of their brother, a resident of Prague, the research featured all three siblings and the author was, thus, able to compare and contrast their speech with reference to the linking device. The participants were between the ages of 20 and 30 while two identified as working class and three considered themselves to be members of the middle class. Furthermore, the Australians were placed under the magnifying glass owing to their historical connection with New Zealand English which appears to be setting a new trend in the occurrence of intrusive /r/ by producing it after the diphthong /aʊ/.

4.1.1 **Intrusive /r/ after schwa**

We have already established that, according to Cruttenden, the most salient phonetic environment likely to include intrusive /r/ is when preceded by schwa. In the light of this fact, the Australian group's overall average was 28%, meaning that the non-rhotic participants employed the linking device after /ə/. The following chart shows the percentage of occurrence in each speaker's recording. In order to simplify the designation of the speakers, the females will be referred to as F1 and F2, with the males being called M1, M2 and M3.

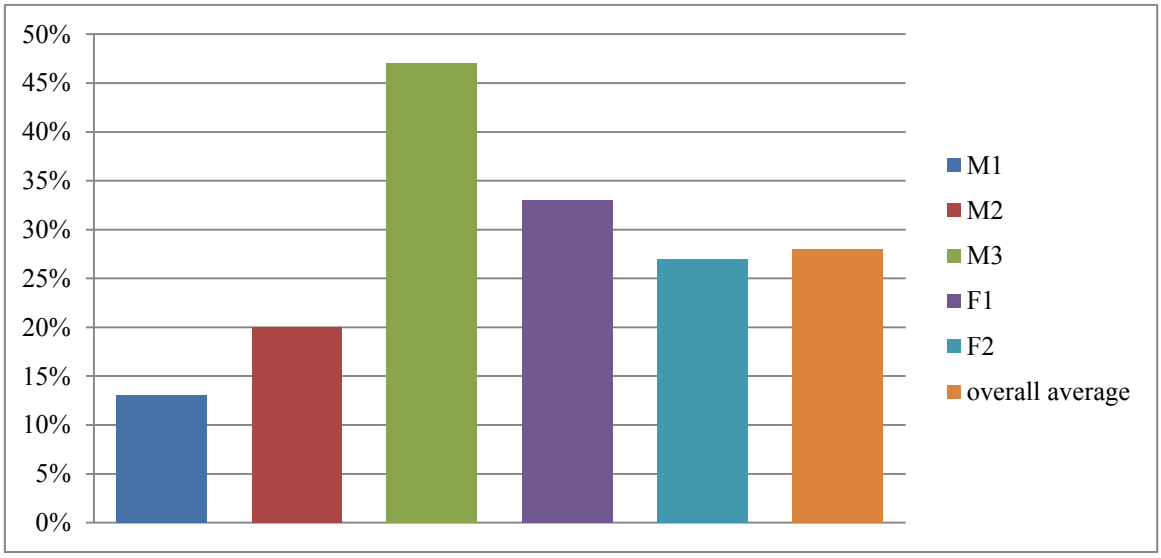

Figure 6. The occurrence of /r/ intrusion after schwa in the Australian group.

As can be inferred, M3 articulated intrusive /r/ after the mid-central vowel in 47% of the cases as opposed to the other two men whose score was 13% and 20% respectively. The background information provided by M3 in the questionnaire might partly support the theory that his having spent 6 years in London may have impacted his accent since F2, whose score was also not poor (27%), was living in London at the time of the recording too. Her score is higher than that of her brother, M2, as he only produced the link in 20% of instances; this may further be compared with the results of their sister, F1, who articulated the sound in 33% of the tokens. Understandably, F1, F2 and M2 had all grown up in the same household but were spread out all over the world which could have given rise to the noticeable differences in their pronunciation.

As far as M3 and F2's shared London experience is concerned, there was a wide gap of 20% despite either of the speakers having been exposed to the London accent for an extended period of time. With this in mind, the two British Londoners who took part in the study only distributed the linking device in 22% and 0% of the tokens. In terms of social

class membership, the recordings suggest that causality may be unlikely to exist since both categories seemed to produce the linking device rather variably, e.g. M3, a middle class participant, articulated intrusive /r/ in almost every other token. In contrast, M1, also a member of the middle class, only used it in 13% of the cases while the third and final middle class partaker, F2, employed it in 27% of the sentences. In conclusion, it is possible that the status of the speaker might influence the occurrence of the speech mannerism; however, a more in-depth study would need to be conducted to confirm such a statement.

4.1.2 **Intrusive /r/ after /ɔ:/**

The previous chapter contained an assertion that the speakers were prone to pronouncing intrusive /r/ subsequently to schwa. Yet, in comparison with the mid-back vowel sound, the total average was more than twice as high in the second phonetic environment as illustrated in the chart below.

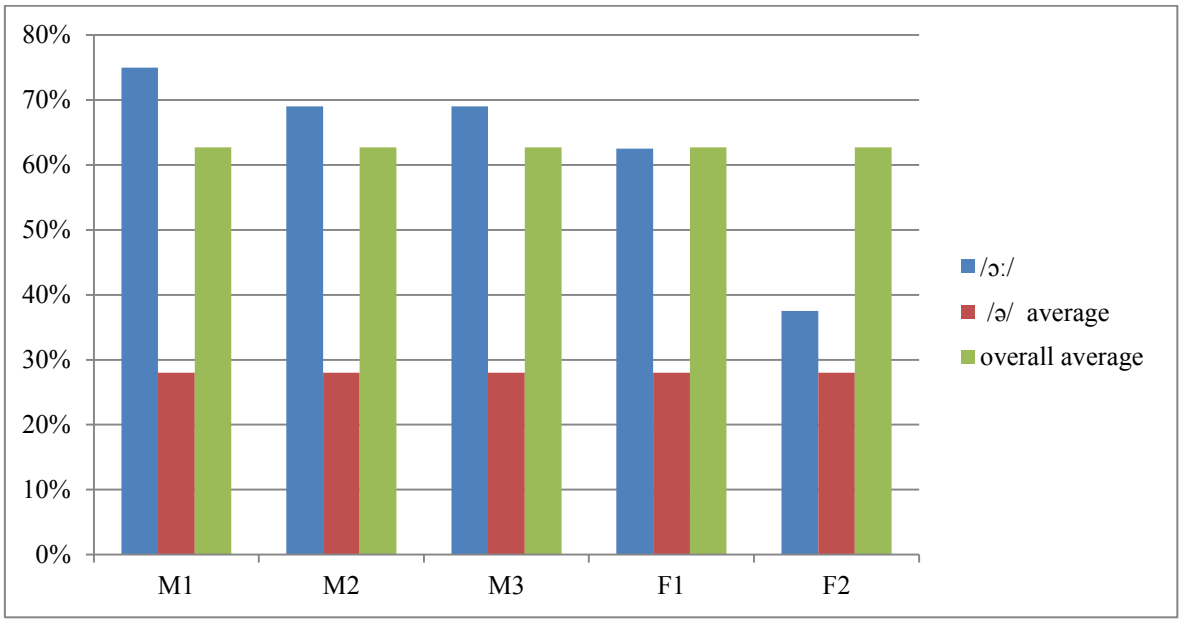

Figure 7. The occurrence of intrusive /r/ after /ɔ:/ in the Australian group.

In fact, the overall average of the occurrence of intrusive /r/ after the long mid-back vowel was 62.7%, that is to say more than 34% higher than that of the previous vowel sound, contrary to Cruttenden's account of the phenomenon mentioned in theoretical part. The entire group, with the exception of F2, employed /r/ intrusion in more than 60% of the tokens which is undoubtedly conspicuous and astonishing. F2 reached a markedly lower score than her colleagues, although 37.5% is by no means little; the results will be contrasted with the UK group later on. In addition, word-internal /r/ intrusion was scrutinised in sentences no. 26, 8 and 28, i.e. 'gnawing', 'drawing' and 'Kafkaesque'. The data may suggest that word-internal /r/ intrusion, in spite of the stigma attached to it, may

be less frowned upon by the Australian speakers since each speaker employed the vowel-to-vowel link in at least one of the cases. As has been mentioned, the text included 16 tokens of /ɔː/, two of which were represented by the common utterance 'I saw it' /ˈsɔː**r**ɪt/. Altogether, 3 tokens of intrusive /r/ were realised by all the speakers – sentences no. 18 'I saw it on the news last night' /ˈsɔː**r**ɪt/, no. 20 'She stars on Law and Order' /ˈlɔː**r**ən ˈɔːdə/ and one token used in the dialogue 'Divorced now. Oh, the law of love' /ˈlɔː**r**əv ˈlʌv/. 4 speakers distributed intrusive /r/ in the sentence 'You saw it in my eyes?' /ˈsɔː**r**ɪt/ which was a part of the dialogue. In contrast, sentence no. 3 'I saw Adam stub out his cigarette on the handrail' /ˈsɔːˈ**r**ædəm/ did not contain the linking sound in any of the recordings.

The data may suggest that the intervocalic consonant may not be socially conditioned in this particular environment since a clear correlation between the speakers' socio-economic background and its production was not discovered.

4.1.3 **Intrusive /r/ after /ɑː/ and /aʊ/**

A particular area of interest was the emergence of intrusive /r/ in prevocalic positions after the diphthong /aʊ/ as the adjacent linking device was said to be replacing the commonly employed linking /w/ and /j/ in New Zealand English (for more detail see 1.5.5). Given the close relationship of the two language varieties, it was to be investigated whether the revelation of the consonant would occur in the Australian group as well. However, none of the participants created an intervocalic link in the form of intrusive /r/.

The five tokens of the long vowel /ɑː/ included in the text were also realised fairly often, with an overall group average of 28%. The author is aware that the lexical items with word-final /ɑː/ are few in number which is reflected in the text since the English language does not provide a large inventory of such lexemes. Incidentally, an articulatory issue labelled 'creaky voice' arose from M2's recording; this feature made it impossible to evaluate the speakers' pronunciation of the vowel. On the other hand, three of the Australians produced the sound in 2 cases, while the last speaker in only one. The results are illustrated in the following chart.

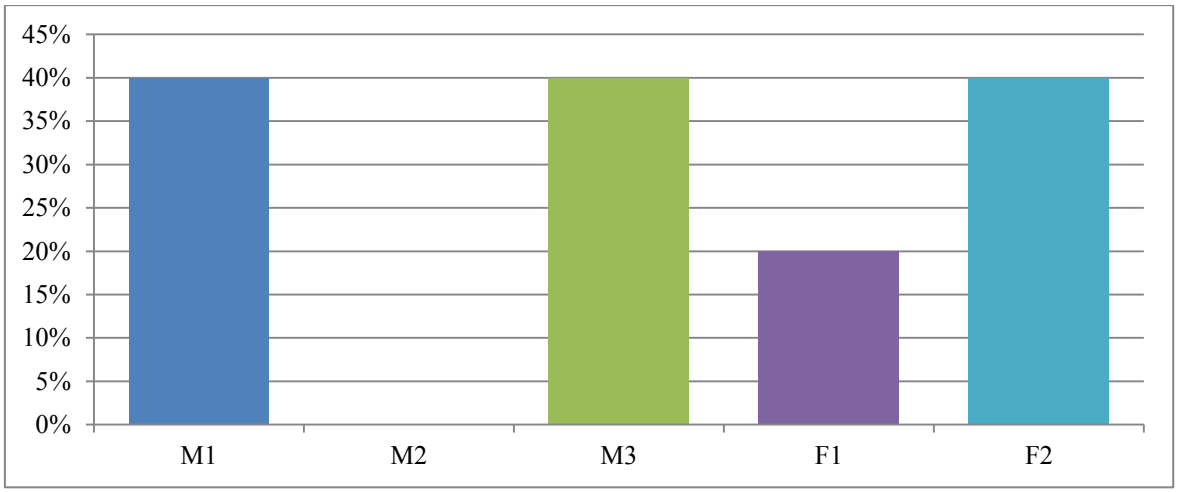

Figure 8. The occurrence of intrusive /r/ after the vowel /ɑ:/ in the Australian group.

Similarly to the other two vowels, the distribution of the device seemed to be rather independent of the socio-economic status of the speakers and varied in both social groups. Nonetheless, /r/ intrusion after the front vowel was definitely present in the Australian group although to a lesser extent than after the vowel /ɔ:/. On the whole, M1, M3 and F2 achieved a score of 40% while the London-based F2 only 20%.

4.1.4 **Potential social conditioners**

The Australian group did not convey the impression of being unified in the production of the phenomenon. The differences, however, could not be attributed to the speakers' class membership, since the distribution of the linking device in the two social groups was highly varied. The final results are showed in the subsequent chart with all the intrusive /r/ tokens factored in.

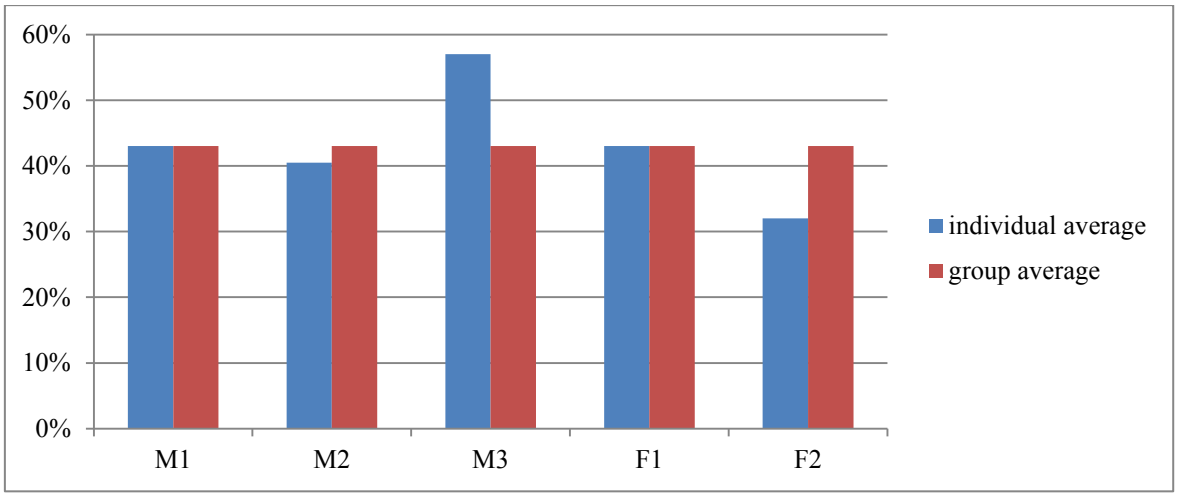

Figure 9. The overall percentage of occurrence of intrusive /r/ in the Australian group.

The overall group average stands at 43% which is a relatively high score. The amassed data did not indicate class as a potential constraint on the variable, nor could age

or education be evaluated as significant determiners. The variability of the distribution is likely to be caused by the spontaneous decisions taken by the group and the exposure to the other varieties of English. Had the participants lived in partial isolation in one place their entire lives, it would have been considerably more apparent which factors gave rise to the production of intrusive /r/.

4.2 Irish group

The study was enriched by the presence of two Irish speakers from two different parts of the country; one came from the very south region and the other from the capital city of Dublin. As concerns class, both speakers were members of the middle class and were living in Prague at the time of the study, teaching English in a language school. What's more, the man and woman were between 20 and 30 years of age and possessed a university degree.

Due to the low occurrence of the phenomenon in the extracted data, it is not thought to be favoured by the Irish speakers. In fact, the woman did not employ the device in any of the tokens, while the man did so in only one, namely in sentence no. 18 'I saw it on the news last night' /ˈsɔːɹɪt/. The emergence of /r/ intrusion in the material or lack thereof may be connected with the subjects' level of rhoticity which was significantly higher than in the other groups. Moreover, the Irish accent may also be under the influence of the second official language of Ireland and therefore have distinct characteristics which are not salient in the UK group.

4.3 North American group

The second purely rhotic set of respondents, the North American group, consisted of three American women from Minneapolis, Minnesota, and a lady from Toronto, Canada. They were all between 20 and 30 years of age and had a university education. As far as social class is concerned, the women identified as middle class. The data collected showed that none of the North American speakers articulated intrusive /r/ in any of the tokens, achieving similar results to the Irish group that comprised rhotic speakers as well. The theoretical framework suggests that the only areas inhabited by non-r-pronouncing Americans subject to /r/ intrusion are eastern New England and New York (for more detail see 1.5.5).

4.4 UK group

The UK group consisted of 9 respondents from 6 different regions of the United Kingdom. The following map in Figure 10 highlights the areas of the country inhabited by them in red colour. It is noteworthy that 3 of the speakers had emigrated and, consequently, did not reside there anymore. Henceforth, the speakers will be referred to using the abbreviations M, for males, and F, for females.

Figure 10. *United Kingdom Outline Map*. Digital image. *World Atlas*. 2 Apr. 2017. <http://www.worldatlas.com/webimage/countrys/europe/outline/uk.gif>.

As can be seen, the group was richly varied as virtually all four historical parts of the UK were represented in the data collected. Firstly, there were two speakers from the capital city (F3 and M4) one Birmingham-born resident (M5) and also 3 representatives of the northern part of England (M6, M9 and F5) from Bradford, a town situated in the immediate vicinity of Leeds. Secondly, the Scottish accent was analysed thanks to the presence of one Glasgow citizen (M7) and Northern Ireland was also included as a person from Belfast (M8) agreed to take part in the study. Finally, a Welsh female from Pembrokeshire (F4) supplied her recording, rendering the group complete. The majority of the participants were aged 20 to 30 with the exception of F3 who was 64 years old. All in all, there were only two middle class speakers (F3 and F4) while the rest of the group all belonged to the working class. Furthermore, the participants had all gained a university degree and 4 of them had taught English in a foreign country at some point in their lives.

There was a close relation between M9 and F5 since the two of them were siblings, similarly to F1, F2 and M2 of the first geographical group.

4.4.1 **Intrusive /r/ after schwa**

The phonetic environment is thought to attract the occurrence of intrusive /r/ more than the other vowels, as Cruttenden suggests (316). As the table shows, the frequency with which intrusive /r/ emerged after the mid-central vowel was in line with the dissimilarity of the accents spoken in the British Isles.

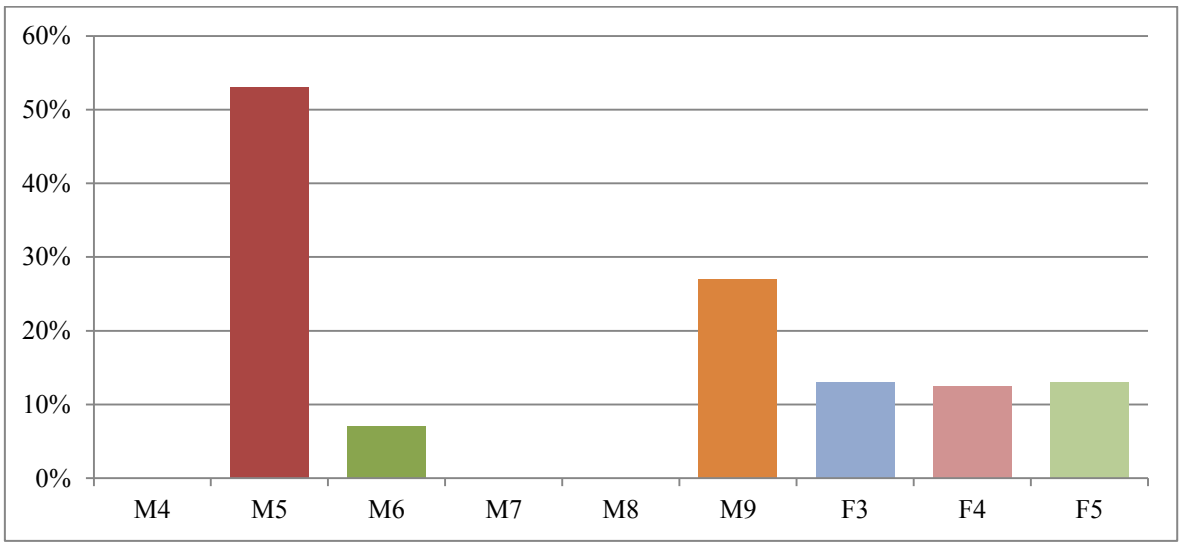

Figure 11. The occurrence of intrusive /r/ after the mid-central vowel in the UK group.

The data collected contained similar results for the three women – the 64-year-old London-born woman (F3), F4 from Wales and F5 from Bradford – since all three distributed the sound in 13% of the tokens. F3 and F4 were both members of the middle class, but F5 was not; it is therefore debatable whether this fact had any impact on their pronunciation. On the other hand, the Birmingham-born M5 employed the linking sound roughly four times as often, in 53% of the cases. The data also showed that two of the working class participants, M5 and M9, averaged higher than the middle class respondents, but M6 and F5, both working class, did not. As for the other speakers, M4, M7 and M8 did not create the link in any of the tokens, which could be ascribed to the rhoticity of their speech as regards M7 and M8. At the same time, the non-rhotic speaker from London (M4) strangely did not pronounce the linking sound in spite of the fact that the other Londoner (F3) did. In the Australian group, F2 and M3 had spent some time in London which was believed to have changed their accent. That said, our data set did not indicate a clear correlation between the emergence of the sound and the British capital. The overall group average of occurrence after this particular sound was then merely 14%.

4.4.2 **Intrusive /r/ after /ɔ:/**

It is evident from the recordings that if the participant produced the link after schwa, they did so in the case of the long vowel /ɔ:/ as well. M4, M7 and M8 excluded, all the non-rhotic speakers used the sound even more often in this phonetic environment than after the mid-central vowel /ə/. The contrast is showed in the following chart.

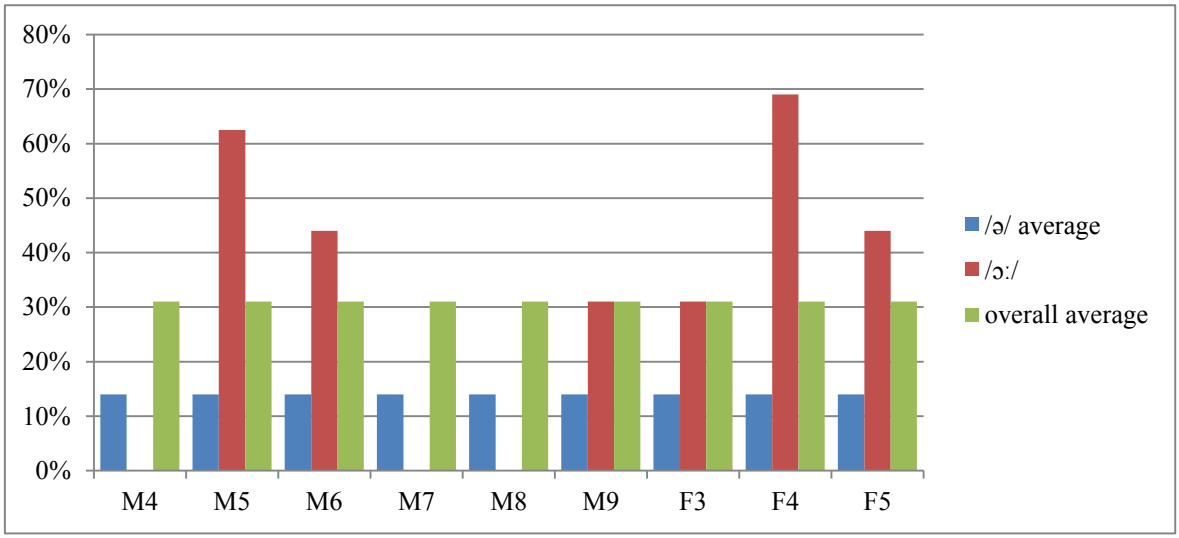

Figure 12. The occurrence of intrusive /r/ after /ɔ:/; the red column indicates an individual's personal average while the green one designates the overall group average of emergence after /ɔ:/.

The previously acknowledged fact that the phenomenon is more likely to be articulated after schwa was totally irrelevant in the material as the long vowel /ɔ:/ was twice as salient in the respondents' speech, i.e. in 31% of the tokens. If the Scottish and Northern Irish men were eliminated, the overall average would rise to 40%. To put it in perspective, schwa only compelled the participants to distribute the device in 14% of the cases, leading to the belief that the mid-back vowel may be of greater significance than previously anticipated. The data suggests that M9 and F5, brother and sister, differed in the usage of the speech mannerism by more than 13%, which was also the case in the previous section, meaning that M9's pronunciation might have been altered by the years he had spent abroad. The other gentleman from Bradford (M6) employed it in 44% of the cases as did F5, also from Bradford. Moreover, class membership is unlikely to play a prominent role in the gesture production because neither group was more prone to uttering the linking device; e.g. M5, a working class speaker, pronounced it in 62.5% of the tokens, while F4, a member of the middle class, in 69% of the cases. To conclude, M7 and M8 failed to create the link due to their being rhotic speakers; it is important to realise that the Irish group also contained r-pronouncing speakers and achieved similar results to the Scottish and Northern Irish men. M4 remained an outsider of the non-r-pronoucing group for unknown reasons.

The most frequently realised intrusive /r/ tokens in the UK group were in sentences no. 18 ‘I saw it on the news last night’ /ˈsɔːrɪt/, no. 20 ‘She stars on Law and Order’ /ˈlɔːrən ˈɔːdə/ and in one sentence from the dialogue ‘Divorced now. Oh, the law of love…’ /ˈlɔːrəv ˈlʌv/. In these instances intrusive /r/ was articulated by 5 speakers, similarly to the Australian group. That said, the examined feature was also observed in sentence no. 8 ‘The mosquitoes are gnawing at me’ /ˈnɔːrɪŋ/ where the word-internal linking sound was produced by 4 respondents.

4.4.3 **Intrusive /r/ after /ɑː/ and /aʊ/**

The frequency of occurrence after /ɑː/ was generally lower than after /ɔː/ but surprisingly 8% higher than after schwa, even though there were only 5 /ɑː/ tokens in the text. The results are showed in the subsequent chart.

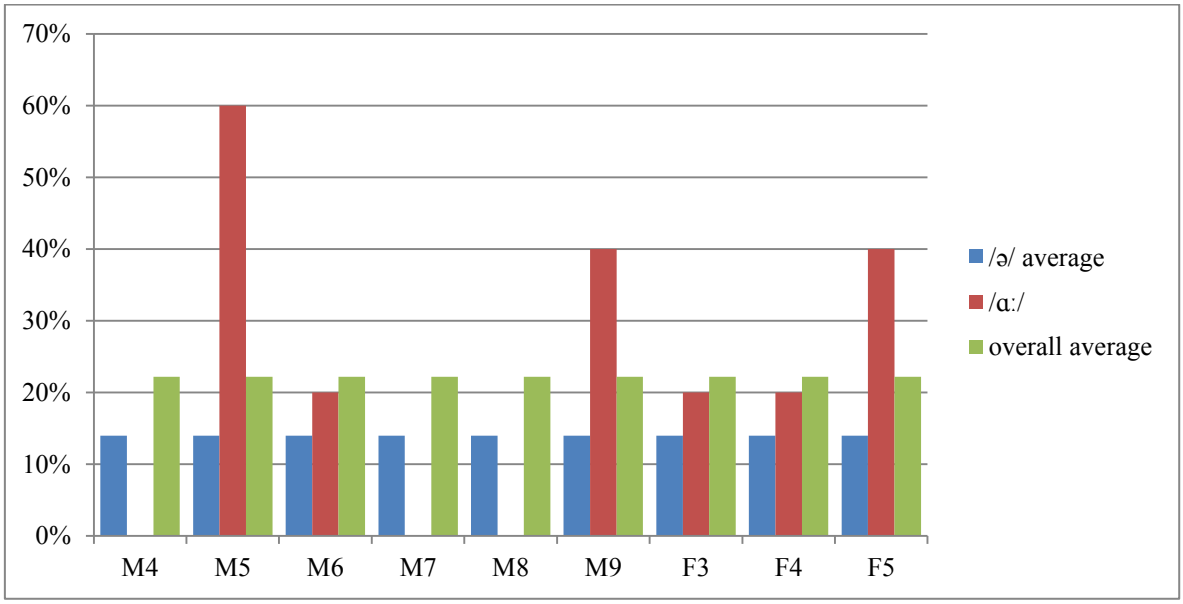

Figure 13. The occurrence of intrusive /r/ after /ɑː/; the red column indicates an individual’s personal average while the green one designates the overall group average of emergence after /ɑː/.

Judging by the data, schwa is least likely to attract the distribution of the linking device, leaving the mid-back vowel /ɔː/ reign supreme among the tokens. The trends were similar to the other two vowels, with F5, M5 and M9, all working class, being among the most regular users of the phenomenon. The middle class participants (F3 and F4) had a comparatively lower average, although this could not be seen as a rule owing to M6’s results. As for the two siblings scrutinised in the study, the long vowel /ɑː/ was the only environment where F5 and M9 reached identical results. /r/ intrusion after the diphthong /aʊ/ did not emerge in the data and was therefore disregarded in this set of participants as a potentially significant phonetic environment as far as the linking sound is concerned.

4.4.4 **Potential social conditioners**

The UK group was far less cohesive than the Australian one in terms of the diversity of accents which impacted the evaluation of the results. The social constraints would require a separate analysis in each of the regions since the features exhibited by them are inevitably varied. The tendencies revealed in the recordings pointed at the fact that class may be a determining factor in the occurrence of the phenomenon, but even the lower socio-economic group was inconsistent in intrusive /r/ usage. There were fluctuations in the emergence of the phenomenon in both social groups, regardless of the environment. Moreover, the presence of two blood-related partakers enabled a glimpse into the effect of travelling on the individual's pronunciation, with M9 having admitted that he had lost the accent his sister spoke with which was somewhat visible in the analyses of the data. The oldest participant (F3) had a slightly lower-than-average percentage of occurrence than the younger subjects; hence, we could assume that age may also be of importance. The following table contrasts the individual results with those of the entire group, encompassing all the phonetic environments delineated in the previous chapters.

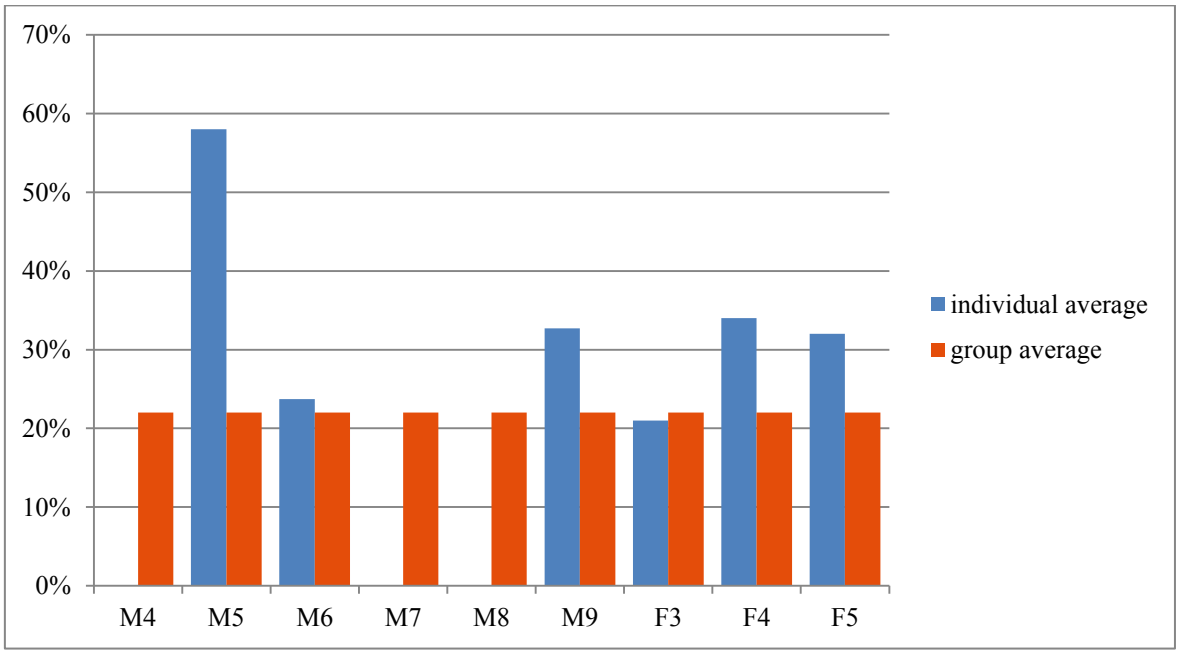

Figure 14. The overall percentage of occurrence of intrusive /r/ in the UK group.

4.5 Comparative analysis

The phenomenon of intrusive /r/ operated rather asymmetrically in the geographical groups. The Australian speakers who participated in the study were by and large more inclined to articulate the linking device, especially in positions after the long vowel /ɔː/ where the average surged to almost 63%, i.e. more than double the amount of the UK group. The results of the two Australian expatriates (M3 and F2) did not convey the impression of unity with the Londoners of the UK group owing to the disparity in the production of the sound; the former were more susceptible to /r/ intrusion while the latter used it rather moderately. The following chart illustrates the frequency with which /r/ intrusion appeared in the extracted data of the individual groups in contrast with the overall average of the entire set of participants.

Figure 15. The occurrence of intrusive /r/ in the inspected geographical groups.

As has been stated, the reading task featured 37 tokens of intrusive /r/. The data showed that 12 out of the 20 speakers articulated the device in at least one case. There was an indisputable connection between the Scot, the Irish man and woman, the Northern Irish participant and the North American women as their speech was virtually devoid of the linking device, most likely due to their being rhotic speakers. Seven out of the eight rhotic speakers who participated in the study did not articulate the device in any of the cases, with the exception of the Irish male who produced intrusive /r/ only in sentence no. 18 'I saw it on the news last night' /ˈsɔːɹɪt/. Moreover, 11 out of the 12 non-rhotic respondents articulated the target phenomenon. The rhotic speakers excluded, there was not found to be a significant difference between the production of the target feature in men (36,6%) and women (32,8%). The following chart illustrates the occurrence of intrusive /r/ in the speech of the rhotic and non-rhotic speakers.

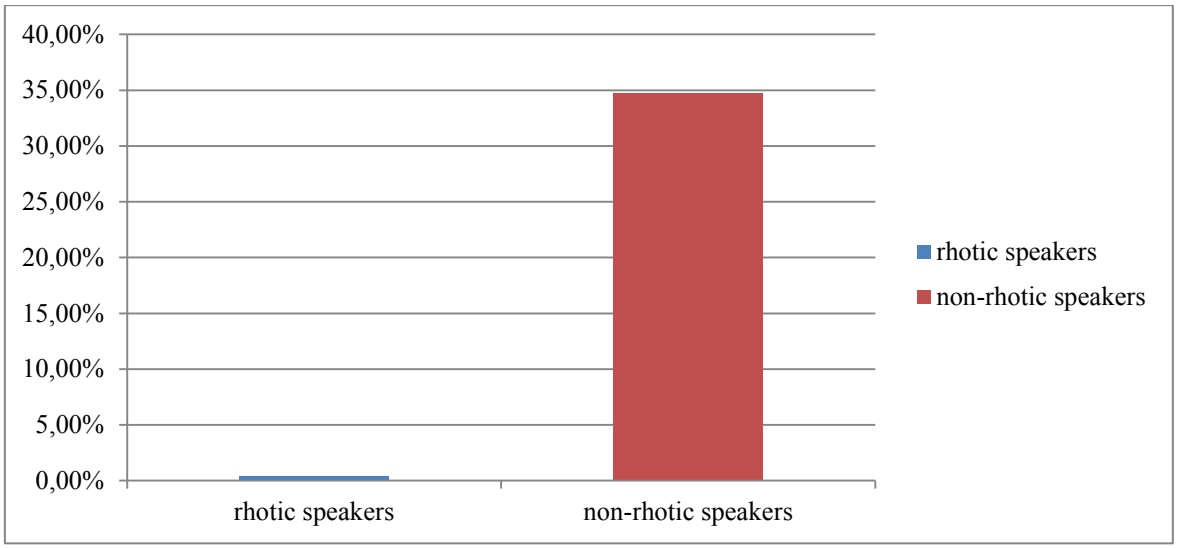

Figure 16. The occurrence of intrusive /r/ in the speech of the rhotic and non-rhotic speakers.

The amassed data showed that intrusive /r/ occurred in roughly 35% of the tokens in the non-rhotic group, but in only 0.4% of the cases in the rhotic group. The stark contrast between the averages may be attributed to the rhoticity of the latter which is believed to be responsible for the lack of intrusive /r/ in rhotic accents, as suggested in the theoretical part of this thesis (see 1.5.3). Furthermore, class membership was also scrutinised and the following chart illustrates the contrast between the emergence of the phenomenon in the speech of the middle class and working class subjects.

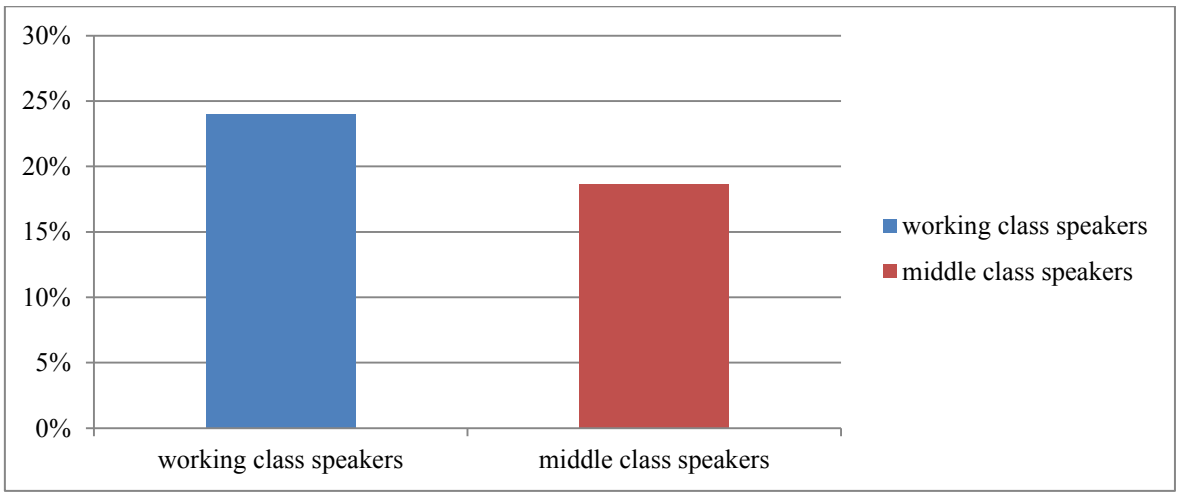

Figure 17. The occurrence of intrusive /r/ in the speech of the middle class and working class participants.

The middle class speakers appeared slightly less likely to produce the linking device than the working class group of participants; the former did so in 19% of the tokens, while the latter in almost 24%. The margin being merely 5%, it is too narrow to be able to draw a conclusion about the effect of the socio-economic status on the distribution of intrusive /r/. The following section will present some other noticeable tendencies which appeared in the recordings.

4.6 **Other tendencies**

The tokens were allocated in various kinds of positions, one of which was of particular interest to the author – the presence of the target sound on the clause boundary. This was scrutinised in sentence no. 15 ‘I thought John’s from America and I was wrong’ /əˈmerɪkə**r**ən/ where the coordinator was preceded by schwa. The data may suggest that the distribution of the device in such environments may be less salient since none of the recordings contained the linking device. Another point of interest was the emergence of intrusive /r/ in proper nouns, which had potentially serious semantic repercussions; one of the cases being sentence no. 7 ‘Pamela Evans is here’. Five speakers pronounced the name /ˈpæmələˈ**r**evəṇz/, effectively changing the surname to ‘Revans’ which was rather curious. Be that as it may, the participants were much more vigilant when it comes to place names, opting for articulatory hiatus instead of linking the two words together. To demonstrate, ‘Utah is a federal state’ /ˈjuːtɑː**r**ɪz/ involved intrusive /r/ in only two recordings, namely in the speech of M5 and M9. Consequently, it was concluded that such instances made the speakers more aware of the intended meaning and possibly the chaos which could have ensued had they been complemented with the link.

Overall, intrusive /r/ was most frequently distributed in sentences no. 18 ‘I saw it on the news last night’ and no. 20 ‘She stars on Law and Order’ /ˈlɔː**r**ən/, where a total of 10 subjects produced it. This was also individually observed in the UK and Australian groups. In contrast, the UK group differed from the Australian one in that 5 of them produced intrusive /r/ in sentence no. 2 ‘The meaning of vanilla ice strikes me as rather odd’ /vəˈnɪlə ˈ**r**aɪs/, but the token was only realised by one participant (M3) in the Australian group. Intrusive /r/ in medial environments was fairly common as well, with ‘drawing’ /ˈdrɔː**r**ɪŋ/ and ‘gnawing’ /ˈnɔː**r**ɪŋ/ being pronounced with the linking sound in 8 and 7 cases, respectively. On the other hand, sentence no. 3 ‘I saw Adam stub out his cigarette’ /ˈsɔːˈ**r**ædəm/ did not at all feature the target phenomenon. The close vicinity of another /r/ which was inspected in two cases – sentence no. 16 ‘He left the camera in the basement’ /ˈkæmərə**r**ɪn/ and sentence no. 17 ‘This website offers extra information about the programme’ /ˈekstrəˌ**r**ɪnfəˈmeɪʃən/ – might have prevented the respondents from employing the linking sound, since only one speaker (F5) pronounced intrusive /r/ in sentence no. 16. Surprisingly, numerous mispronunciations transpired in the data; the lexical items such as ‘Arkansas’ and ‘Utah’ were commonly referred to as /ɑːˈkænsəs/ and /ˈʊtə/, with the former being altered in 37.5% of the recordings.

CONCLUSION

The principal aim of this thesis was to delineate the manner in which the phenomenon of intrusive /r/ operates in English native accents with a special emphasis on the social constraints on the variable. As the examined feature goes hand in hand with a plethora of other articulatory gestures, it was convenient to provide an account of the most pertinent aspects of connected speech. The core of the theoretical part was constituted by an in-depth description of the linking device the purpose of which was to build a foundation for the following study conducted in the practical part.

As far as the social conditioners are concerned, this thesis aimed to inspect whether the socio-economic status of the speakers would have an effect on the distribution of intrusive /r/ in the data. The trend which was observed in Paul Foulkes' study that intrusive /r/ was more common in the speech of working class than middle class speakers and upon which the first hypothesis was based could not be confirmed in our data set. Paul Warren's experiments on /r/ intrusion also contained evidence for social "conditioning of intrusive /r/" in New Zealand English (57). However, the recordings suggested that variation in intrusive /r/ usage in this data set may possibly be independent of the speakers' status, with the linking device being produced in both the middle class and working class participants' speech. These findings are on a par with Dr Hannisdal's assertion that no significant correlation between the emergence of the phenomenon and a social category has been discovered (172). In terms of the geographical groups, the respondents appeared to be more influenced by the exposure to other varities of English than by social factors. Furthermore, gender did not seem to constrain the distribution of the linking device as the margin was less than 4%. It is also noteworthy that the English teachers who took part in the study were not believed to be influenced by their knowledge of the language since the usage of the sound is thought to be subliminal.

As concerns the second hypothesis, there was a stark contrast between the rhotic and non-rhotic users of English in our data set since the former categorically avoided the distribution of intrusive /r/, while the latter commonly employed the sound. The difference being more than 34%, it would seem that the non-r-pronouncing speakers were prone to distributing the examined feature more frequently than the rhotic ones. Statistically speaking, 21% of the tokens of the phenomenon were realised, with the Australian group being the heaviest users of /r/ intrusion, pronouncing it in 43% of the cases. Consequently, it would be advisable to carry out more comprehensive studies on the presence of /r/

intrusion in Australian English with a sharper focus on the long mid-back vowel /ɔ:/ which appeared to be most favoured by the group (62.7%). In like manner, the UK speakers most frequently inserted intrusive /r/ after word-final /ɔ:/ (31%), a fact which may challenge the claim that intrusive /r/ might be most salient after schwa. The study also revealed that the vowel /ɑ:/ attracted /r/ intrusion more frequently than schwa; that is to say the data was consistent with the research findings of Dr. Hannisdal (176) and conflicted with those of Alan Cruttenden (316). With this in mind, intrusive /r/ still remains to be largely uncharted territory and is certainly worth being investigated on a greater scale. The research having featured predominantly younger users of English, it could be argued that intrusive /r/ may possibly not be as stigmatised as it used to be, as pointed out in Skandera (59), since it was produced by 12 speakers and in 8 cases even word-internally. Additional research could scrutinise the impact of age on the variable and further investigate the differences between the social classes on a regional basis in relation to the phenomenon, to refute or support the findings published by Foulkes.

As for the limitations of the research, the data did not arise from a casual conversation but from a reading session. The technique was chosen as it enabled the author to inspect specific phonetic environments which might not otherwise have appeared. That said, the speech tempo of certain speakers happened to be slower than expected as reading tasks are inherently different from spontaneous speech. Alternatively, since the majority of speakers recorded the text on their own, some of them may have misunderstood or not perused the instructions in which it was repeatedly accentuated that the text was designed to elicit rapid speech. As far as the variables such the age and education of the participants are concerned, the group turned out to be somewhat homogenous. Nevertheless, there were other factors, such as social class and regional origin, which could be examined in relation to the linking device. In addition, the assessment of the data was undertaken by two individuals with distinct auditory perceptual skills, resulting in the analysis being, to a certain degree, subjective.

The defining characteristic of /r/ intrusion is its insignificant impact on the received message since native speakers do not, as a rule, encounter difficulty in understanding each other in spite of the linking element. In conclusion, awareness of the phenomenon should be raised among foreign learners of the English language to avoid the misunderstandings and confusion which may be caused by the presence of the linking device and to enhance their perceptual skills by drawing their attention to the occurrence of the linking element in English native speech.

WORKS CITED

Books:

Coupland, Nicolas John Robert. "Dialect Style, Social Class and Metacultural Performance: The Pantomime Dame." Ed. Nicolas John Robert Coupland. *The New Sociolinguistics Reader*. Ed. Adam Jaworski. New York: Palgrave Macmillan, 2009. 311-25.

Cruttenden, Alan. *Gimson's Pronunciation of English*. 8th ed. New York: Routledge, 2014.

Hewings, Martin. *English Pronunciation in Use Advanced*. Cambridge: Cambridge UP, 2007.

Labov, William. "The anatomy of style-shifting." Ed. John R. Rickford and Penelope Eckert. *Style and Sociolinguistic Variation*. Cambridge: Cambridge UP, 2002. 85-108.

Meyerhoff, Miriam. *Introducing Sociolinguistics*. New York: Routledge, 2006. Print.

Roach, Peter. *English Phonetics and Phonology: A Practical Course*. 4th ed. Cambridge: Cambridge UP, 2009.

Skandera, Paul, and Peter Burleigh. *A Manual of English Phonetics and Phonology: Twelve Lessons with an Integrated Course in Phonetic Transcription*. Tübingen: Gunter Narr Verlag, 2005.

Volín, Jan. *IPA-Based Transcription for Czech Students of English*. Praha: Karolinum, 2003.

Wardhaugh, Ronald. *An Introduction to Sociolinguistics*. 5th ed. Oxford: Blackwell, 2006.

eBooks:

Algeo, John, and Carmen Acevedo Butcher. *The Origins and Development of the English Language*. 7th ed. Boston: Wadsworth Cengage Learning, 2013. *Google Books*. 10 Mar. 2017.
<https://books.google.cz/books?id=_X4WAAAAQBAJ&dq=intrusive+r+american&hl=cs&source=gbs_navlinks_s>.

Bybee, Joan. *Language, Usage and Cognition*. Cambridge: Cambridge UP, 2010. *Google Books*. 19 Apr. 2017.
<https://books.google.cz/books?id=Htwy_iPG114C&dq=Sociophonetic+variation&hl=cs&source=gbs_navlinks_s>.

Hardcastle, William J., John Laver, and Fiona E. Gibbon, eds. *The Handbook of Phonetic Sciences*. 2nd ed. Chichester: Blackwell, 2013. iBook.

Nevalainen, Terttu, and Elizabeth Closs Traugott, eds. *The Oxford Handbook of the History of English*. New York: Oxford UP, 2012. *Google Books*. 19 Apr. 2017. <https://books.google.cz/books?id=xOiQ5GdkpkUC&dq=loss+of+rhoticity&hl=cs&source=gbs_navlinks_s>.

Ogden, Richard. *An Introduction to English Phonetics*. Edinburgh: Edinburgh UP, 2009. *Google Books*. 19 Apr. 2017. <https://books.google.cz/books?id=t-mqBgAAQBAJ&dq=inaudible+release&hl=cs&source=gbs_navlinks_s>.

Preston, Dennis R., and Nancy Niedzielski, eds. *A Reader in Sociolinguistics*. New York: Walter De Gruyter, 2017. *Google Books*. 10 Mar. 2017. <https://books.google.cz/books?id=et8jErDGLCYC&dq=A+Reader+in+Sociophonetics+pdf&hl=cs&source=gbs_navlinks_s>.

Romaine, Suzanne, ed. *The Cambridge History of the English Language*. Vol. 4. Cambridge: Cambridge UP, 1998. *Google Books*. Mar. 2008. 10 Mar. 2017. <https://books.google.cz/books?id=NxHuNOvwt7wC&dq=intrusive+r&hl=cs&source=gbs_navlinks_s>.

Trudgill, Peter. *Investigations in Sociohistorical Linguistics: Stories of Colonisation and Contact*. Cambridge: Cambridge UP, 2010. *Google Books*. 19 Apr. 2017. <https://books.google.cz/books?id=mBWAgZ2Isb0C&dq=loss+of+rhoticity&hl=cs&source=gbs_navlinks_s>.

Van Herk, Gerard. *What Is Sociolinguistics?* Chichester: John Wiley & Sons, 2012. *Google Books*. 19 Apr. 2017. <https://books.google.cz/books?id=X5mqoBAluX0C&dq=sociolinguistics+free+variation&hl=cs&source=gbs_navlinks_s>.

Online sources:

Broadbent, Judith. "Linking and Intrusive R in English." *UCL Working Papers in Linguistics 3* (1991): 281-302. *UCL Psychology and Language Sciences*. 10 Mar. 2017. <http://www.ucl.ac.uk/pals/research/linguistics/research/uclwpl/uclwpl3>.

Cox, Felicity, Sallyanne Palethorpe, Linda Buckley, and Samantha Bentink. "Hiatus Resolution and Linking ‘r’ in Australian English." *Journal of the International Phonetic Association* 44.2 (2014): 155-78. *Cambridge Core*. Web. 20 Feb. 2017. <https://doi.org/10.1017/S0025100314000036>.

Docherty, Gerard, and Paul Foulkes. "The Social Life of Phonetics and Phonology." *Journal of Phonetics* 34.4 (2006): 409-38. *ResearchGate*. 19 Apr. 2017. <https://www.researchgate.net/publication/221999021_The_social_life_of_phonetics_and_phonology>.

Eckert, Penelope. "The Whole Woman: Sex and Gender Differences in Variation." *Language Variation and Change* 1 (1989): 245-67. *Stanford University*. 19 Apr. 2017. <https://web.stanford.edu/~eckert/PDF/WholeWoman.pdf>.

Foulkes, Paul. "English [r]-sandhi - A Sociolinguistic Perspective." *Histoire Épistémologie Langage* 19.1 (1997): 73-96. *Persée*. 10 Mar. 2017. <http://www.persee.fr/doc/hel_0750-8069_1997_num_19_1_2573>.

Hannisdal, Bente Rebecca. *Variability and Change in Received Pronunciation: A Study of Six Phonological Variables in the Speech of Television Newsreaders*. Diss. U of Bergen, 2006. *University of Bergen Library*. 10 Mar. 2017. <http://hdl.handle.net/1956/2335>.

Hay, Jen, and Paul Warren. "Experiments on /r/ Intrusion." *Wellington Working Papers* 14 (2002): 47-58. *School of Linguistics and Applied Language Studies*. 10 Mar. 2017. <http://www.victoria.ac.nz/lals/resources/Publications/wwp/WWP2002v14.pdf>.

Mompean, Jose A. "Phonological Free Variation in English: An Empirical Study." *ResearchGate*. Jan. 2008. 19 Apr. 2017. <https://www.researchgate.net/publication/237528415_Phonological_Free_Variation_in_English_An_Empirical_Study>.

Pictures:

New England Commonwealth. Digital image. *Fallout Wiki*. 25 Mar. 2017. <http://vignette3.wikia.nocookie.net/fallout/images/8/8f/FO_New_England_Commonwealth.gif/revision/latest?cb=20100501182844>.

United Kingdom Outline Map. Digital image. *World Atlas*. 2 Apr. 2017. < http://www.worldatlas.com/webimage/countrys/europe/outline/uk.gif>.

APPENDICES

Appendix 1. The instructions given to the participants.

First of all, thank you from the bottom of my heart for agreeing to participate in this study, it really means a lot to me. All the information provided will be kept strictly confidential and anonymous.

The study is focused on the most common aspects of **connected speech**.

Before recording, please read the instructions below.

1. Go into a quiet room and make sure nobody disturbs for the following 5-10 minutes.
2. Make sure you have a portable recording device, smart phones usually tend to have a high-quality built-in microphone.
3. Before you start recording, please read the whole text **once** to familiarize yourself with it.
4. It is vital you read each sentence **continuously** and if you make a slip of the tongue, please start again from the beginning of the sentence. We are studying FAST COLLOQUIAL SPEECH, so please do not make unnecessary breaks and do not focus on your diction and articulation too much.
5. Finally, we are NOT testing or aiming to correct your pronunciation, this study is purely DESCRIPTIVE, therefore the collection of AUTHENTIC DATA is KEY.
   So, try to relax and read it as you normally would to your friend, colleague etc.

- The reading comprises two parts, the first one is a list of sentences (page 2), the second one a short dialogue (page 3). Since you are alone in the room, please read both parts of the dialogue (A and B).
- Please note that some of the sentences may appear slightly non-sensical which is intentional.

Be so kind and send the recordings to me via e-mail: denisvanicek@gmail.com.

Thank you for your time.

Denis Vaníček

Appendix 2. Part one of the reading task used for recording.

1. I heard Miranda and Michael roaring on the street.
2. The meaning of vanilla ice strikes me as rather odd.
3. I saw Adam stub out his cigarette on the handrail!
4. I'd like a vodka and tonic, please.
5. Linda absolutely adores nougat and chocolate!
6. This sweater makes me feel like a straw in the wind.
7. Pamela Evans is here!
8. The mosquitoes are *gnawing at me!*
9. I went to the spa at Hilton Orlando.
10. How can anyone eat raw eggs?
11. Is this your idea of a joke?
12. I mean, Russia and China in East Asia.
13. The dog held his left paw up.
14. Malta is a member of the EU.
15. I thought John's from America and I was wrong.
16. He left the camera in the basement.
17. This website offers extra information about the programme.
18. I saw it on the news last night.
19. Utah is a federal state.
20. She stars on Law and Order.
21. There's a bra on the floor.
22. Sit by the fire and thaw out.
23. The dog locked his jaw on her arm.
24. Arkansas introduced a new law.
25. We see each other every now and then.
26. I'm not very fond of drawing.
27. A supernova appeared in the sky.
28. The Kafkaesque terror of the endless interrogations.
29. She had a bourgeois upbringing.
30. A flaw in the crystal that caused it to shatter.

Appendix 3. Part two of the reading task.

A: Is it you? Amanda?

B: Oh, hi, Dave!

A: It's been ages! You must be married with kids now!

B: Yeah…I have two.

A: Really? What are their names?

B: Um…Theresa and… May?

A: Oh…

B: You?

A: No, I'm still single.

B: Me, too.

A: But you just said you were married!

B: Divorced now. Oh, the law of love…

A: And the kids? Theresa and May?

B: Gone. They moved to Warsaw, actually…

A: None of that's true, is it?

B: No… I always end up lying to impress.

A: Right, I knew it.

B: You saw it in my eyes?

A: I did, yeah.

B: Too bad. Well, I'm waiting for my chicken to thaw out. Fancy some?

Appendix 4. The questionnaire sent to the participants.

1. Where do you come from originally?
2. Have you spent a significant period of time (at least one year) in a foreign country?
3. What's the highest level of education you've achieved?
4. What's your age?
5. Which social class do you belong to?